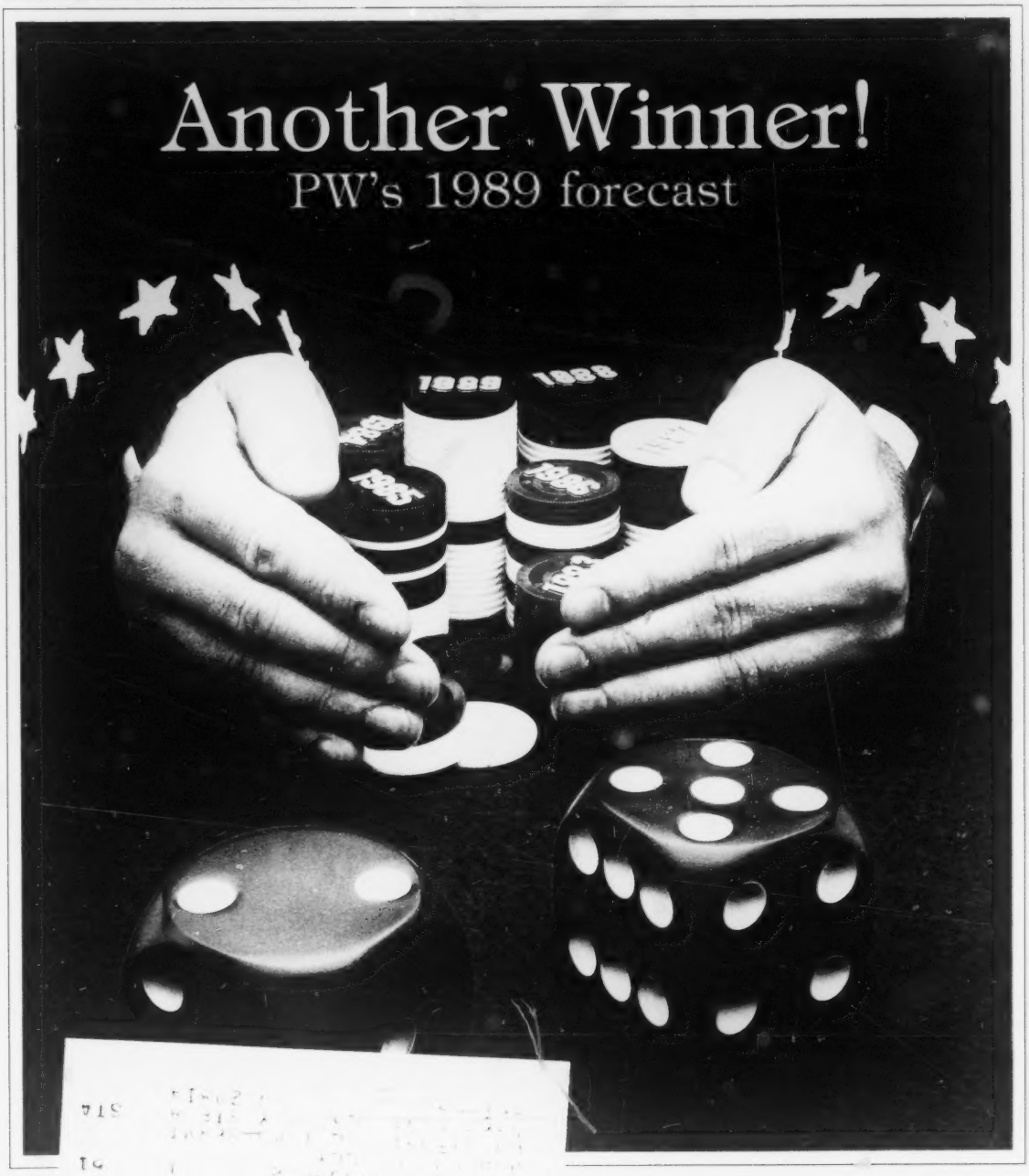
PurchasingWorld®

THE BUYER'S MAGAZINE JANUARY 1989



PW economist takes higher road

Three '89 econometric models • Top purchasing execs look at '89

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by Robert S. Reichard, editor-in-chief

All sources 'go' for '89

The prognosis for the next year or so doesn't look to be all that bad.

That's the nearly unanimous opinion of purchasing managers, vendors, economists, government analysts, and several econometric models—all sources that have been tapped for this special "Outlook '89" issue of *PurchasingWorld*. To be sure, there are some differences of opinion. But for the most part they are not all that earthshaking.

Indeed, if you average out these multiple projections, the general upward price drift over the next 12 months is not likely to be that much different from that of the past 12 months. On the other hand, trends in individual product lines could vary significantly from those noted in 1988.

Metals, for example, should be taking a breather. And chemicals, plastics, and paper will be going up at a considerably slower pace than in 1988. On the other hand, more highly fabricated goods—reflecting the big raw material runups of last year—should move up at a faster pace.

Why all the optimism about avoiding a major price runup? Several factors are suggested. For one, labor costs (especially in manufacturing where good productivity gains continue to be reported) won't be too much of a problem. Demand-pull influences should be less strong, too—as industrial production gains slow down.

Also supplies should begin to ease up a bit as the capital spending increases of the past year gradually translate into industrial potential. And last but not least, energy quotes—a sector which traditionally has had a strong psychological as well as real influence on prices—will remain pretty much under control.

Keeping all the above in mind, here's a capsule summary of what the various sources noted above are predicting in the way of price increases for the new year:

• **Buyers:** Purchasing executives who are on the firing line remain quite optimistic. Members of the NAPM Business Survey Committee, for example, are projecting only a 3.7% in the prices of the goods they purchase over the next 12 months—actually 1.3 percentage points under the 5% boost they say they experienced in 1988. And a nationwide *PW* readership survey backs this up—with the average advance anticipated for 1989 put at just over 4%.

• **Vendors:** No real problems are seen here either. A new McGraw-Hill/DRI survey suggests that the average asking prices for manufactured goods will advance by only 3.1% during 1989. Particularly

Continued on next page...

Big year for bargaining

It's going to be another big year on the labor negotiation front—with major collective bargaining agreements covering 3.1 million workers slated to expire or reopen in 1989.

To put this in proper perspective, that's 36% of the 8.6 million workers under these large pacts. The figures, based on a new Bureau of Labor Statistics tabulation, suggest that most of the action in manufacturing will be centered in transportation equipment and the primary metals industries—with each of these sectors calling for negotiations involving more than 100,000 employees.

In the metal sphere, June is the deadline month for aluminum, with the steel cutoff point scheduled for two months later (August).

Nonmanufacturing negotiation won't be negligible either—where bargaining is expected to be most crucial in the communications and services areas. And there's a healthy number of state and local workers that will be bargaining this year, too.

Most labor analysts, however, don't seem overly concerned about long work stoppages. Their thinking: Union emphasis will continue to be on job security, with dollars-and-cents earnings being a secondary factor.

The Bureau of Labor Statistics, in releasing the new study, also promises a more detailed rundown later this month in its January 1989 Monthly Labor Review.

The 1989 labor calendar

(Major collective bargaining pacts)

	Number of agreements	Workers covered (in 1,000s)
January		
Tobacco, Airlines	19	51
February		
Food stores	23	103
March		
State and local government	58	178
April		
Construction	74	176
May		
Communications, Construction	82	379
June		
State and local government, construction, health services, aluminum	278	998
July		
Construction	34	66
August		
Communications, local government, steel	73	535
September		
Food stores, state and local government, maritime	66	236
October		
Aerospace, food stores	34	162
November		
Local government, health services	19	57
December		
Real estate management, building maintenance	36	130
Total	794	3,063

Source: Bureau of Labor Statistics

encouraging is the actual 10% decline envisioned for nonferrous metals.

• **Econometric models:** A tabulation of three big mathematically-oriented models shows the average finished goods producer price rising by 4.5% in 1989. But if you zero in on just industrial commodities, the increase is somewhat less. Wharton, for example, sees the advance in this more purchasing-oriented yardstick at only 3.6%. Also worth noting: Roughly half of the 33 specific product lines detailed in a sampling of the DRI model are expected to show smaller price increases in 1989 than in 1988.

• **Economists:** This is the only area where a fair-sized difference of opinion is noted. Wharton Econometrics' Dr. Nariman Behravesh sees the industrial price level rising 3.6% this year. That's well above the small 1.3% advance envisioned by *PW*'s own economic consultant Dr. Roger Williams. While Williams admits he's sticking his neck out, he feels that the combination of moderating factors noted above (no big wage push, moderating demand gains, and a slowly increasing supply) are being underestimated by many of his fellow analysts.

Put all the above into the hopper—and all signs seem to point to a 4% or slightly lower increase in industrial producer prices over the new year—a pretty upbeat forecast considering the fact that the economy will be entering its seventh consecutive year of growth.

New office style aids prices

Big dollars will continue to be shelled out here over the next few years—with totals reaching the $10 billion mark by 1992. So predict Freedonia Group analysts who put the annual growth rate at 8.7% over this period. Leading the advance, according to the Cleveland-based firm, will be desk and desk extensions, ergonomic seating (reflecting increased awareness of problems associated with sitting for hours in front of VDT) and open systems such as cluster and one-piece modular stations. These latter systems (already accounting for two out of every five dollars spent) will increasingly function not only as traditional desks and filing cabinets but also provide wire management for electrical outlets and lighting.

Continued on page 12

Energy stays inflation-free

Budget for another year of virtually inflation-free energy. Reason: The basic determinant (the imported crude oil price) is expected to hold steady at a relatively low $15/barrel.

That's the assumption being used by Department of Energy analysts in their latest quarterly forecast of energy price trends. Coupled with the expectation of a relatively modest energy demand increase (up only 1.6% in 1989 *versus* 3.4% over 1987-88), here's what they see ahead on a product-by-product basis:

■ **Gasoline:** The overall 1989 price average (all pump grades) won't change all that much—94¢/gallon over the new year *versus* 96¢/gallon in 1987-88. But there could be a 10¢/gallon swing between the slow-demand 1Q (89¢/gallon) and the big summer driving season.

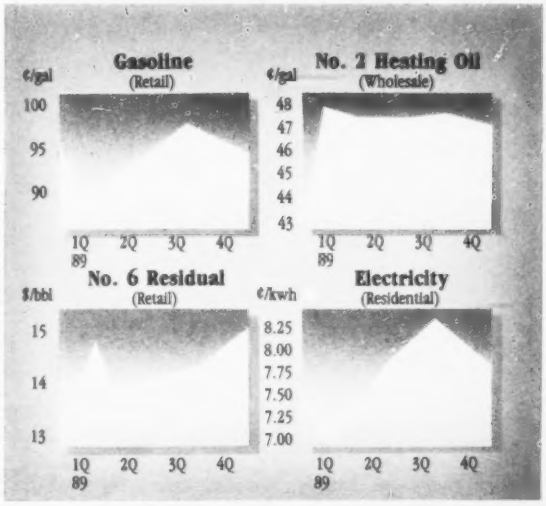
■ **Distillates:** Barring another very cold winter, 1Q price increases are expected to be a moderate 48¢/gallon wholesale in the case of No.2 fuel and $14.92/barrel in the case of No. 6 resid.

■ **Natural gas:** Wellhead cost increases will push prices to utilities up about 5% in 1989 to an average of $2.29/million BTU. Despite this, the fuel will remain competitive with resid.

■ **Electricity:** Only a 1.6% overall rise is seen for residential rates this year. But summer costs will show their normally big seasonal rise (this time to above 8¢/kwh compared to only 7.2¢/kwh

Despite all the price restraint, conservation progress persists. The energy/real GNP ratio is targeted to fall another 1% or so in 1989 as more efficient machinery continues to come onstream.

1989 Energy tags
The seasons call the turns



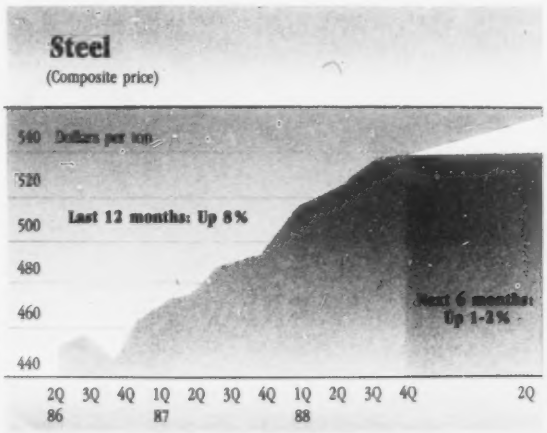
Better steel market balance

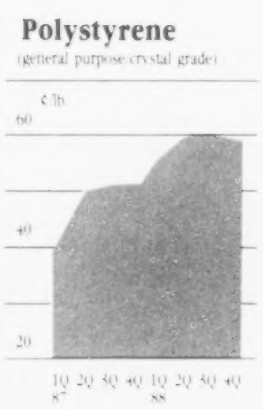
CURRENT SITUATION: The price advances of a few quarters back seem to be running out of steam. A few boosts are scheduled to go into effect this month, but they're relatively small—and market averages this quarter are likely to run only about 1.5% above late 1988 levels. That's in sharp contrast to earlier increases which were running at 2% or more per quarter. **One factor behind the slowdown: An easing demand trend.**

DEMAND: The current buying lull is expected to continue. Some additional slippage is anticipated after mid-year—**holding the 1989 shipment total to near 78 million tons—about five million under the figure estimated for the year just ended.** Consumption should show a similar pattern—with totals for the year dropping under 95 million tons—well under the better than 102 million tons that were chewed up in 1988. **An inventory shift will also play a role.** Some two million tons will be chopped off this year.

SUPPLY: The projected drop in demand points to much better market balance. This can probably best be appreciated by looking at mill operating rates which last year averaged near 88%. This year only an 83-85% rate is seen for the first half—with an under 80% reading likely after midyear. All this, in turn, suggests a continuation of the narrowing leadtime trend already underway. **Imports, too will remain a plus factor on the supply side.**

PRICE OUTLOOK: The moderating trend will continue. But some upward drift is inevitable—if only because of the increases that mills recently contracted over the next 6-12 months with large volume users. On the other hand, the overall rise should be small—with restraints forced by 1) better market balance, 2) fewer raw material cost hikes, 3) continuing productivity gains (it now takes less than six manhours to make a ton of steel *versus* 10.1 hours back in 1982 and 4) fair-sized mill profits.





Softer polystyrene trends

A softening trend may be in the making—as big-volume buyers pay only 58¢/lb. for the general purpose/crystal grade—off 2¢/lb. from previous levels. Impact grades have also eased. Where do we go from here? The market pressure would seem to point to more decline as capacity rises 11% this year. But costs are another factor. Should they ease, polystyrene could drop below 55¢/lb.

Magnesium up again

Prices have just moved up 5¢/lb.—bringing the primary metal and die cast alloy up to $1.63/lb. and $1.43/lb., respectively. This comes on top of a recent (June 1988) increase—and reflects both firm demand and the tightest Free World producer inventory level in more than four years (only a 5.8 week supply at current shipping rates). On a rosier note: Two new production startups are anticipated this year—including Norak Hydro's 60,000 metric-ton-per-year Becanceour, Quebec smelter.

Zinc is bullish

Bullishness is still the order of the day—with tags at latest report running up into the mid-70s range, far above the 42¢/lb. lows of late 1987. And alloys have moved up commensurately. Blame it all on seven straight years of supply deficit. In any case, demand from the galvanizing sector remains strong and supplies continue to experience disruptions. Market balance could be achieved later this year—as Free World production increases to near 5.2 million tons. And this, in turn, should put some modest downward pressure on prices—with quotes slipping back into the 60-70¢/lb. range later this year.

Lead should drop in 1989

Cold weather is keeping battery demand high—enough to push the heavy metal up into the low 40s range. But things could change as 1989 wears on—as the Free World supply of refined lead moves up 3.5%—about 1-2 percentage points above anticipated demand gains. And while the metal isn't likely to fall out of bed, it's hard to see this year's quotes averaging much above 35¢/lb.

Long-distance rates to drop

Basic long-distance phone rates are going down 4%, reflecting lower access charges that AT&T and other firms pay the local telephone companies. Also likely to cut communications costs: AT&T's proposal to reduce data transmission prices by 27% and offer promotions on installation and service. Also reassuring on the communications front: A new McGraw-Hill/DRI survey finds communications firms planning on getting an average of only 1.7% more than last year for their services—well under boosts suggested for most other industries.

Refractories

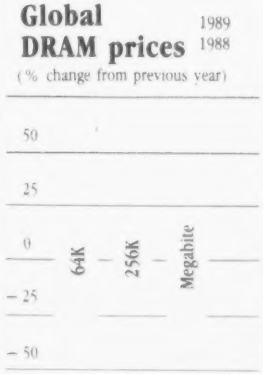
Brace for substantial increases—5-6% on magnesite brick, 8% on magnesia carbon brick, and 5-10% on high alumina brick. Behind the boost: Rising raw material costs. Aluminum metal, for example, is up more than 50% over the past year—with other hikes noted for graphite (up more than 40%) and high-purity alumina (up 20%).

DRAMs ease price pinch

The pinch may be easing. One sign: An increasing supply of 1 megabit DRAMS has forced grey market tags down by as much as 35% over the past month or two. Prices as low as $24 are quoted, compared to as high as $37 this past fall. And that's only the beginning. A new In-Stat projection sees average tags dropping sharply across the board this year. Here's what the Scottsdale, AZ-based consulting firm sees in the way of percent decline this year *vis a vis* 1988: 64Ks (down 29%), 256K, (down 33%), and 1 megabit (down 45%).

Global DRAM prices

(% change from previous year)



Copper prices stay up

Volatility remains the order of the day as the red metal begins to slip from its recent $1.60-plus/lb. peak. But don't expect any sharp descent to under $1/lb. levels. Reason: A continuing tight supply situation which will persist for at least another quarter or two. True, U.S. output has risen 20%. But this has been more than offset by declines in other producing countries. Fears of a U.S. strike in mid-1989 also should put a floor under tags. In any case, it's hard to see prices dropping much under $1.25/lb. over the next 3-6 months.

Paper demand decelerates

CURRENT SITUATION: It's been a rough year on the paper and paperboard price front. Over the past 12 months, for example, paperboard, corrugated boxes, and paper office supplies have risen 12%, 7% and 8% respectively. Commercial and industrial tissues have also advanced significantly. Much of this has been due to solid demand gains—with overall paper and paperboard production up by nearly 4%. **Tighter supplies also played a major role in the price hikes—as overall 1988 operating rates in some sectors approached full-capacity levels.**

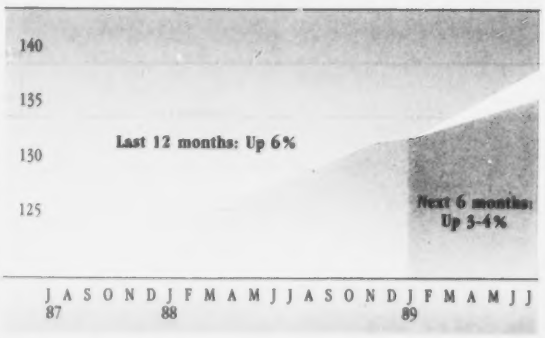
DEMAND: A deceleration in the rate of gain is fairly likely—reflecting the somewhat slower overall GNP growth rate anticipated for 1989. **Paper and paper product production at this stage of the game looks to rise by only 2-3%.** But there are a few bullish factors still around. Thus exports, aided by the still-soft U.S. dollar could be strong again in 1989.

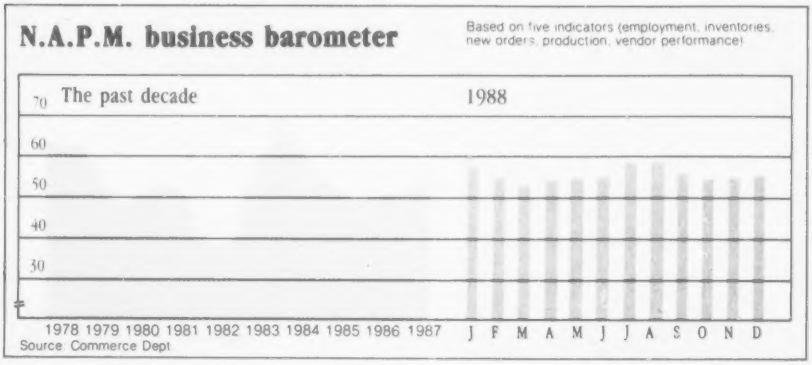
SUPPLY: The worst of the tightness may be over—if reports of a huge 62% increase in paper industry capital spending over the 1987-89 period prove to be anywhere near correct. This suggests some modest declines in operating rates for the new year—to 97% in containerboard, 95% for coated papers, and 95% for uncoated free sheet. **Also imports remain a positive supply factor—particularly in uncoated groundwood, uncoated free sheet, and coated papers**—as foreign producers try to establish and maintain a long-term presence in the U.S. market.

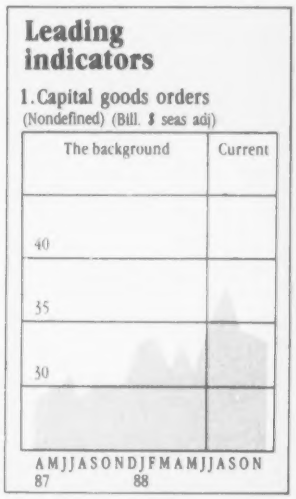
PRICE OUTLOOK: Further, though smaller-than-1988, increases are seen for 1989. Over the next few months, for example, another increase in pulp seems like a pretty good bet. There are also indications of another price boost in cut size (copier) paper. Also producers have announced a $30/ton February increase in newsprint—though the latter (given the current discounting) could be in trouble.

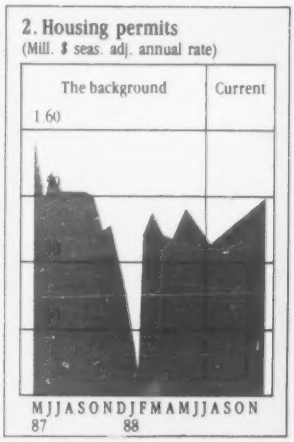
Paper & allied products

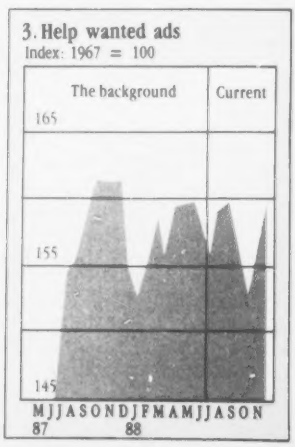
Index: 1982 = 100




N.A.P.M. business barometer
Based on five indicators (employment, inventories, new orders, production, vendor performance)
The past decade
1988
70
60
50
40
30
1978 1979 1980 1981 1982 1983 1984 1985 1986 1987
J F M A M J J A S O N D
Source: Commerce Dept.







KEY ECONOMIC TRENDS

Barometer reads 'good business weather'

The new year is getting off to a fairly good start—supporting projections for continuing, albeit modest—advances in both GNP and industrial production.

The latest NAPM barometer reading, for example, remains virtually unchanged from the previous month (see chart)—close to seven percentage points above the neutral 50 mark. This is consistent with a real growth rate in excess of 3%.

Another sign of continuing strength: The lack of any inventory excesses. Thus the all-business stock/sales ratio remains near 1.50 months—well under the 1.55 month average of both 1986 and 1987.

Zero in on purchased materials, (the PMs' main concern)—and the picture is equally impressive. Specifically, the current 0.50-0.51 reading again is relatively unchanged from year-earlier levels.

Clearly inventories are now being fine tuned—from basic raw materials all the way up to final demand. Part of this, of course, is due to better computer controls and systems. But another part can be traced to a "keep 'em lean" strategy forced by higher interest rates and top management pressures.

Capital goods orders also support the feeling that the economy is still firm. True, figures here are down from recent peaks. But not enough to prevent an impressive 10% advance *vis a vis* a year ago.

Also on an upbeat note: Machine tool orders continue to come in at a relatively health clip. While there have been a few pauses here in recent months, machine tool makers still see a strong year—and are hiring additional workers to back up such projections.

All this strength in capital goods is pretty much in line with new plant and equipment outlay estimates—all of which point to gains in real terms for 1989.

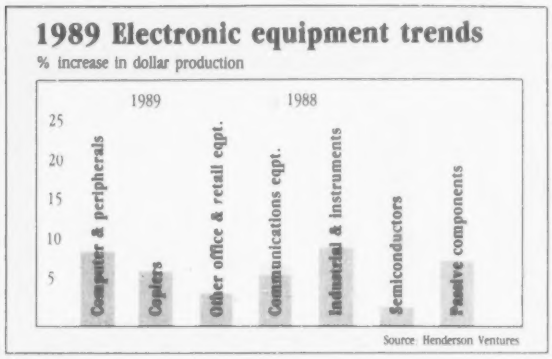
The housing market has also been holding up quite well—especially in light of recent increases in borrowing costs. Thus new permits, a lead indicator of future activity, are still being clocked in at around 1.5 million units at annual rate—the highest level in over a year (see chart).

While such numbers are hardly likely to be sustained, it does provide a good start for 1989. It now looks as if 1.45 million units will be initiated this year—only 1-2% under 1988 levels.

To be sure, spending for other big-ticket consumer durables isn't all that robust. Nevertheless, car production schedules remain a positive sign here—with first quarter 1989 plans running 14% ahead of comparable early 1988 readings.

All this activity in turn, is buying up labor markets. The help-wanted index—an especially sensitive barometer of labor demand—has rebounded to its earlier highs (see chart). If nothing else, it suggests management optimism about the near-term business future.

So does the continuing



increase in the number of jobs reported by the Commerce Dept. Over the past three months, for example, employers added about one million workers to non-farm payrolls. Not surprising, the level of unemployment is now hovering near a 14-year low.

To sum up: There's little indication of any imminent pause in the economy. Most business analysts now see industrial production running at a 3% annual rate through spring—with deceleration, if it does occur, not showing up until sometime after midyear.

Electronics—good year ahead

Another good year looms ahead for the still fast-growing electronics and electronics equipment industries.

A new projection by Henderson Ventures calls for some slowdown in the computer and office equipment category *vis a vis* this past year's big 13.1% advance. But the Los Altos, CA electronics consulting firm remains quite bullish—calling for a respectable 8.4% increase in sales of these products.

Biggest gains will continue to be in central processing units (CPUs) where a 12% advance is seen (*versus* 17% in 1988). Within the CPUs, small units (less than $15,000) will fare best with a solid 17% gain anticipated.

Storage devices, with an expected 9.3% advance (*versus* an 11.2% jump in 1988) should also fare quite well. But a somewhat smaller 6.8% increase is seen for terminals.

In the noncomputer office equipment area, a 6.1% hike is projected for copiers over the next 12 months. Indeed, the only real disappointment will be the "all other" office equipment category which is seen growing only 3.6% in 1989.

Other electronic equipment (excluding computers and office items) should also continue to advance—with the 7.2% figure for communications gear pretty much matching last year's. And while industrial and instrument products will decelerate, the near 10% overall advance here is still quite impressive.

Henderson also provides new estimates for component parts. And here the picture is somewhat less bullish—at least as far as semiconductors are concerned—where this past year's 26% gain is expected to drop to less than 2%.

Passive components, on the other hand, can look forward to another respectable year. Specifically a 7.6% gain is called for—not all that much under the 11.8% estimate for the 12-month period just ended.

CURRENT PRICES

Few changes in month trends

December price trends show little change from previous months—with industrial averages continuing their slow, steady rise (about 3.5% at annual rate).

This time around, however, there are some sector-by-sector differences. Energy, which had been falling steadily over previous months, now seems to be stabilizing—as crude oil prices begin to turn around.

Gasoline, home heating oil, diesel fuel and jet fuel also moved higher. But all these were effectively offset by easiness in coal, natural gas, electric power, liquid petroleum gas and residual fuel—with the latter dropping by a significant 6% over the past 30 days.

Organic chemicals and plastic resins also seem to be quieting down—as increases slow from the hectic pace of this past summer and fall. Inorganics—led by a new advance in sulphur—accelerated a bit (quotes here are up a full percentage point over the past month).

Also on the worrisome side—nonferrous metals continue to advance. Copper is again the leader—though aluminum, lead, zinc, cobalt, and precious metals are all contributing to the new higher average.

Steel levels also are edging up. But there are a few signs of easiness here, too. Example: Some light plate prices have just been dropped $40-50/ton.

Capital goods quotes are still advancing at a manageable 3.5% annual rate. Most notable boosts here in recent weeks have been centered in construction machinery, mining machinery, metal cutting machine tools and transformers. A few bright spots: Trucks and motors and generators—both of which are stable to slightly lower.

Construction items—entering the slow winter season—are now basically mixed. Lumber millwork and plastic plumbing products are somewhat lower. These are being balanced out by continuing strength in wire and cable, paint, and plywood.

A similar mixed picture is shaping up in textiles. Fabrics are still basically soft. Ditto cotton. But synthetic fibers advanced last month—and additional boosts here (in polyesters, nylons, and acrylics) are scheduled for the current month.

One last reassuring note: of the 50 or so subgroups monitored each month by *PW*, some 12 showed declines and another three no change—hardly a sign of any impending inflationary surge.

PROCUREMENT STATUS REPORT

Indicators show leadtimes leveling

Leadtimes continue to level off (see chart)—a fairly encouraging sign inasmuch as both orders and deliveries usually show a seasonal spurt at this time of year.

A new Federal Reserve report also suggests that things are beginning to stabilize. The study notes that, although manufacturers' orders are still brisk, their backlogs are beginning to fall. The Fed further adds that strains on productive capacity, which have led to some price increases, may also be easing up a bit.

This latter conclusion is supported by a new NAPM Business Survey report on prices. Figures here show the gap—between those being hit with increases and the lucky few who are experiencing declines—has been narrowing.

Upshot: Overall price pressures, as measured by the NAPM diffusion index (a yardstick where 50 is considered neutral) have dropped. Note the latest 70 index reading is more than 10 percentage points under levels prevailing this past summer.

Similar improvement is seen in NAPM's speed of delivery rundown. Specifically, the number reporting slowdowns has dropped substantially. Result: The diffusion index here has slipped to around the 52% mark.

All this is not to say that there aren't problems: Take a look at the still-impressive list of items on the NAPM short-supply list. Included at this time are aluminum, copper, stainless steel, bleached paperboard, plastic resins, alkalis, ethylene and its derivatives, titanium dioxide, bearings, rayon and DRAM electronic parts.

But some of these may soon be off the list. Thus the recent decision of a major rayon manufacturer not to shut down should help the synthetic fiber come back into better balance. And on the DRAM front, increasing supplies are beginning to hit the market—to the extent that some even feel a new glut could be in the making sometime later this year.

But perhaps the most encouraging sign of all regarding general availability is an expected 1989 deceleration in production gains—all at a time when new capacity is coming on-stream. Implication: the factory operating rate (84% at latest report) is about to peak out and edge down as the year wears on.

Productivity gains hold down prices

Don't underestimate industrial productivity gains as a price-rise inhibitor.

Overall factory efficiency has been advancing at a solid 3.5% annual rate over the past few years. And even this doesn't tell the whole story, as some individual industries do even better.

Thus a new Bureau of Labor Statistics survey finds that better-than-6% increases were recorded in 1987 by the paper, synthetic fiber, tire, steel, aluminum rolling, TV, and semiconductor industries.

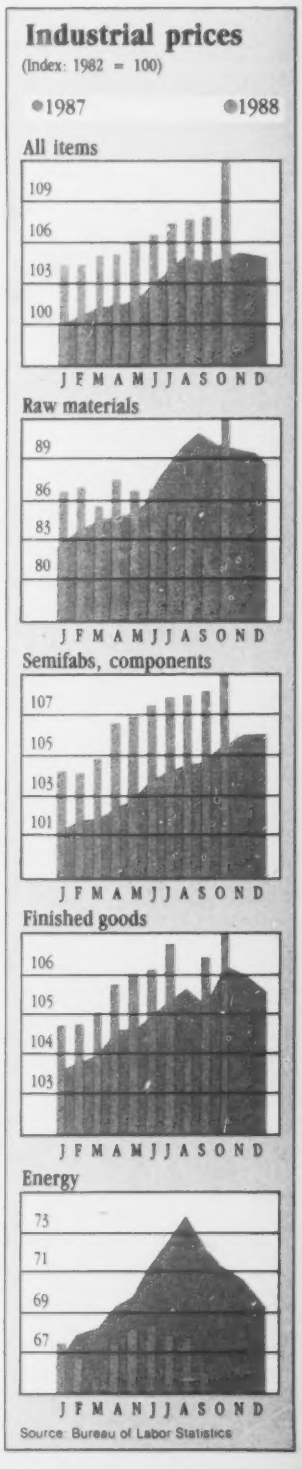
Nor was 1987 a particularly special year. Gains are equally impressive for many of these industries over the longer pull (the past decade—see chart). Over this extended period, the TV and semiconductor industries managed to rack up double-digit annual advances.

Bullishness is also suggested by the fact that over the last recorded year, productivity increases were noted for two-thirds of the 99 industries where current data is available. That's not too much different than a year earlier, when efficiency gains were recorded for about 75% of the surveyed sectors.

The impact of such gains on prices can best be appreciated by comparing them with wage rate increases. For all manufacturing, the 3.5% output per manhour gain over the past few years more than offset a 3.3% annual rate of wage advance. Upshot: A fractional decline in unit labor costs—a key determinant of overall inflationary pressures.

Moreover, zero in on durable goods, and the picture looks even more encouraging. Annual efficiency gains here over the past two years have been in this critical subsector by almost a full percentage point.

Continued ...



STEEL SCENE

Slowdown spills into '89

The steel demand slowdown of the past few months is likely to spill over into early 1989.

At least that's the expectation of the nation's metal buyers and steel service centers. On the purchasing manager score, one out of every three responding to a new NAPM survey says they expect to cut back on their steel procurement over the next three months—nearly five times the minuscule 7% who plan to add to their holdings.

And on the distributor

Continued ...

This month's breakdown

Index 1982 = 100

	Latest level (Oct)	% change from: Month ago	Year ago
Bearings	120.8	2.2	11.3
Bolts, nuts, etc.	108.0	0.2	4.5
Chemicals, inorganic	104.0	1.2	9.5
Chemicals, organic	114.9	0.2	17.5
Concrete products	110.1	0.2	0.5
Corrugated cartons	111.6	0.2	5.9
Cutting tools, small	108.2	0.4	1.7
Electric lamps (bulbs)	122.1	-1.1	-0.7
Electronic components	118.3	0.3	2.6
Fans and blowers	115.2	1.1	4.7
Foundry and forge products	111.3	0.2	4.3
Fuel oil (residual)	36.5	-5.9	-30.9
Furniture, commercial	125.9	0.2	5.0
Gasoline	58.7	4.6	-3.5
Glass, flat	110.7	0.3	2.1
Glass containers	111.9	-0.1	-0.5
Gypsum products	115.1	1.2	-4.7
Hand tools	122.3	0.4	4.7
Hand tools, power driven	113.1	0.9	3.4
Industrial furnaces	122.0	0.2	6.3
Integrating and measuring instruments	115.1	0.1	0.6
Internal combustion engines	112.3	0.0	2.6
Lubricating oil	106.5	-1.1	6.2
Lumber millwork	122.9	-0.5	2.9
Material handling equipment	109.1	0.4	4.4
Metal containers	111.2	-0.3	1.30
Metal mill shapes (nonferrous)	138.8	2.3	21.2
Metal tanks	106.9	0.7	9.5
Motors and generators	124.0	-0.2	6.0
Motor trucks	130.1	-0.1	4.8
Office and store equipment	108.0	0.2	2.3
Paperboard	136.5	0.0	11.4
Paper boxes and shipping containers	126.3	0.3	6.1
Paper office supplies	118.3	1.0	8.3
Paint	114.4	0.5	5.4
Plastic resins	140.3	0.4	19.5
Precision measuring tools	122.1	0.6	4.6
Pumps and compressors	111.2	0.7	5.1
Refractories	115.2	0.5	3.7
Rubber belts and belting	108.0	-0.2	4.3
Scales and balances	106.7	0.4	2.4
Steel products	113.1	0.6	6.7
Switchgear	114.2	-0.1	3.6
Textiles, synthetic fibers	99.5	0.8	6.6
Textiles, gray fabrics	114.3	-0.1	3.2
Tires and tubes	95.0	0.0	4.5
Transformers and power regulators	109.4	0.7	2.2
Welding equipment	118.1	-0.8	5.5
Wire and cable	141.9	7.3	23.6

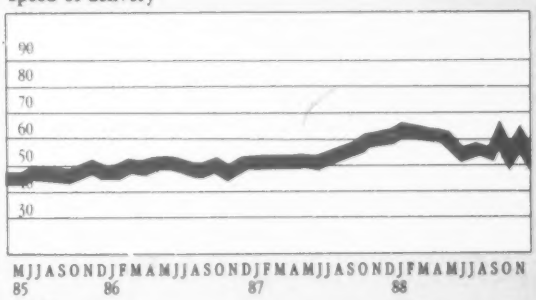
NAPM procurement trends

(seasonally adjusted diffusion indexes)

An index where 50 is defined as the neutral level, to the extent a reading is above 50, it represents an expansionary tendency. More particularly, rising inventory prices, and new orders are seen as positive signs of economic growth. A trend toward slower deliveries is similarly interpreted.

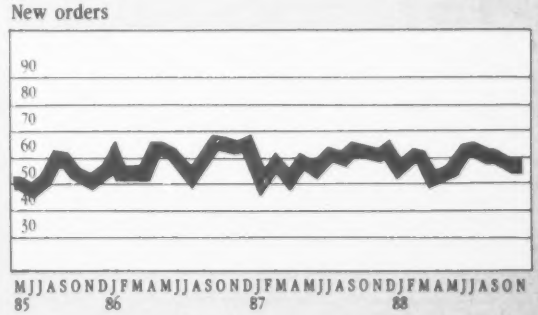
Inventories

Speed of delivery



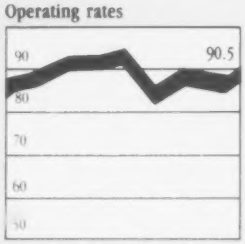
Prices

New orders

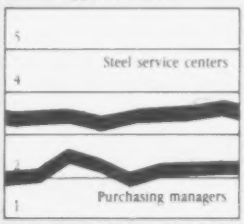


Steel

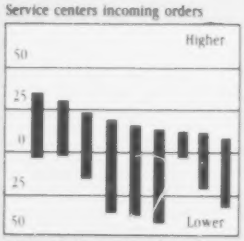
Operating rates



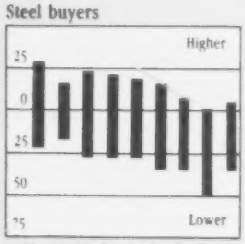
Inventories
(Months supply on hand)



Demand
(Percent of respondents)
Service centers incoming orders



Steel buyers



Source: Steel Service Center Institute, NAPM Steel Buyers Committee

front, the latest Steel Service Center Institute (SSCI) survey tells the same story—36% anticipating cutbacks in incoming orders from end user customers *versus* only 10% who are hoping for a business uptick.

Less impressive industrial production gains are playing a role in this projected demand slowdown. But so are attempts to bring inventories down. The average steel buyer, according to the latest NAPM survey, cut stocks substantially over the past month—as days' supply dropped to only 1.83 months, well under the 2.1 month average of the previous 90 days.

And judging from what they say, further tonnage reductions may be in order. Thus 53% are calling for additional stock paring and not one single PM is anticipating any buildup. To be sure, buyers generally tend to give more emphasis to cutting in these kinds of surveys. But the preponderance of reduction would suggest they really mean business this time around.

SSCI president Andrew G. Sharkey points out, "There is currently more inventory in the total manufacturing system than originally anticipated." And this would seem to apply to his own service centers as well as end users.

Thus the average distributor at latest report was holding close to a $3\frac{1}{2}$ month supply—about $\frac{1}{2}$ month more than a year earlier. As Sharkey puts it, "The inventory/sales ratio is too high—particularly in stainless steel, carbon plate and alloys."

If nothing else, all this retrenchment has reduced fears of tightness. Only about one out of three buyers is currently concerned about shortages—a far cry from six months earlier when 85% of those queried admitted to some nervousness. In any case, the only product areas getting close scrutiny these days are plate, coated sheets and bars.

Another bit of evidence of improving supply-demand balance: The American Iron and Steel Institute operating rate is currently down near 85%. That's five percentage points under the level prevailing as recently as September.

And this rate could be heading even lower. Talks with mills suggest the industry will ship only about 20 million tons of metal over the first three months of the year—off about one million from the comparable 1Q, 1988.

Slower demand may also be putting a damper on new price increases. Indeed, nearly one out of every four queried service center executives expects steel replacement costs to drop during the next six months—the highest such reading since this question was first posed two years ago. Equally significant, the number actually tops the 19% who say they are still bracing for boosts.

Still another indication of a more competitive market: Roughly 25% of foreign mills are said to be more active in seeking business from domestic service centers. That compares to a 2% activity rate noted as recently as this past June.

The percentage of buyers reporting more interest on the part of overseas sellers is also up—10% currently *versus* the near-zero interest of a few quarters back.

In short, it looks like a much more competitive year—better market balance and much more price infighting: See PW Predicts for further comments on how steel markets are likely to fare in the months and quarters ahead.

Telcom market continues growth

The U.S. telecommunications market will continue to show faster-than-average growth—not only over the new year but into 1990 as well.

A new projection by the North American Telecommunications Association (NATA) puts the dollar growth at 4%. And an even more impressive 10% advance is seen for the following year—with totals reaching $33.8 billion.

But there are some individual product exceptions to this trend. Central office switch sales are expected to remain flat over the next few years as local exchange companies wait for existing analog switches to depreciate before converting to digital. In any case, the advent of the Integrated Services Digital Network should hasten the conversion to digital.

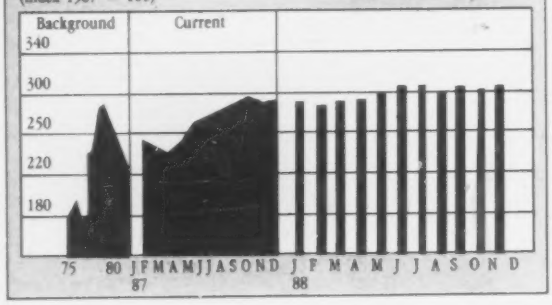
The market for all network equipment, meantime, increased significantly last year to some $10 billion—up from just $8 billion in 1987. NATA says much of this growth comes from the increasing popularity of cellular phone systems.

Continued ...

Raw material price barometer

(Index 1967 = 100)

Last month 305.0
Month before 306.4
Year ago 292.5



LATEST SPOT MARKET PRICES

	Latest price	Previous month	Year ago
FERROUS METALS			
Pig iron, basic, valley, gross ton	213.00	213.00	213.00
Pig iron, Bessemer, Pitts., gross ton	213.00	213.00	213.00
Steel, billets, Pitts., net ton	367.00	367.00	367.00
Steel, structural shapes, Pitts., cwt.	23.90	23.90	23.90
Steel, structural shapes, Chi., cwt.	23.90	23.90	23.90
Steel, structural shapes, Los Angeles, cwt.	23.90	23.90	23.90
Steel, bars, dlvd. Phila., cwt., merchant quality	16.50	16.50	16.50
Steel, bars, Pitts., cwt.	16.50	16.50	16.50
Steel, bars, C.R., Pitts., cwt.	19.45	19.45	19.45
Steel, plates, Pitts., cwt.	23.25	23.25	19.75
Steel, plates, H.R., Pitts., cwt.	23.25	23.25	19.75
Steel, sheets, C.R., Detroit, cwt.	28.15	28.15	28.15
Steel, strip, C.R., Chi., cwt.	36.18	36.18	36.18
Steel, basic wire, Pitts., cwt.	23.65	23.65	23.65
NONFERROUS METALS			
Aluminum, ingot, lb. (market place)	1.075	1.075	.810
Antimony, N.Y., dealer, lb.	0.95	0.95	1.10
Beryllium-copper, cost ingot, lb.	5.90	5.90	5.90
Brass, red, 85%, [sheet], lb.	2.18	2.08	1.84
Brass, yellow, [sheet], lb.	2.14	2.04	1.79
Cadmium, N.Y., dealer, lb.	7.40	6.00	3.00
Copper, electrolytic, wire bars, refd., lb.	1.55	1.45	1.20
Copper sheet, over 24 in., lb.	2.27	2.17	1.93
Lead, common, N.Y., lb.	.40	.40	.42
Magnesium, pig ingot, [99.8%], lb.	1.63	1.58	1.53
Mercury, 20 fl. lots, N.Y., fl.	275.00	285.00	325.00
Molybdenum, oxide, dealer, lb.	3.41	3.45	2.80
Nickel, cathode, dealer, lb.	6.30	5.35	3.03
Platinum, dealer, oz.	596.00	574.00	510.00
Silver, N.Y., oz.	6.18	6.49	6.92
Tin, N.Y., dealer, lb.	3.42	3.41	3.18
Zinc, Prime West, East St. Louis, lb.	.750	.725	.450
Zinc, die casting alloy, No. 3, lb.	.835	.805	.505
PAPER			
Uncoated book #3 offset, ton	965.00	965.00	890.00
Watermarked bond, ton	1080.00	1080.00	985.00
Gummed sealing tape, carton	17.93	17.87	17.14
Grocery sacks, ton	460.00	460.00	410.00
Solid bleached paperboard, ton	730.00	685.00	650.00
Kraft linerboard, 42 lb., unbleached, ton	410.00	410.00	380.00
TEXTILES			
Burlap, 10 oz., 40", N.Y., yd.	.280	.277	.274
Cotton drill, 1.85, 59", 68x49, N.Y., yd.	1.18	0.89	1.24
Cotton middling, 1", N.Y., lb.	.515	.523	.596
Printcloth, 48", 80x80, N.Y., spot, yd.	.50	.48	.63
Army duck, 37", 13 oz., yd.	1.50	1.50	1.51
Blended printcloth, 64", 78x54, yd.	.70	.66	.80
20s combed yarns	1.80	1.80	1.74
Wool 64s, Staple, lb.	4.50	4.75	3.00
CHEMICALS			
Acrylonitrile, tanks, lb.	.360	.360	.395
Ammonia, anhydrous, tankcars, Gulf Coast, ton	91.00	91.00	75.00
Benzene, petroleum, tanks, Houston, gal.	1.80	1.26	.89
Caustic soda, 76% solid, drums, carlots, cwt.	28.00	28.00	26.00
Cresylic acid [over 25%], tanks, lb.	.55	.55	.58
Formaldehyde, USP, 37%, [12% to 15% meth.], tanks, lb.	.106	.106	.106
Glycerine, synthetic, tanks, lb.	.760	.735	.780
Methanol, syn., tanks, 4,000 gals., f.o.b. Gulf Coast plants	.60	.58	.36
Naphthalene, crude, tanks, lb.	.22	.22	.22
Phthalic anhydride, tanks, lb.	.35	.35	.32
Polyethylene resin, low density liner film grade (market place), lb.	.515	.515	.385
Polypropylene, homopolymer grade (market price), lb.	.505	.510	.470
Polystyrene, general purpose grade (market price), lb.	.590	.600	.535
Polyvinyl chloride, pipe grade (market price), lb.	.44	.44	.38
Soda ash, 58%, light carlots, cwt.	6.15	6.15	6.15
Styrene monomer, 99.6%, tanks, lb.	.47	.45	.40
Sulfur, crude, ex-terminal, Tampa, Fla., lt.	142.00	138.00	127.50
Sulfuric acid, 66%, commercial, tanks, ton	66.86	66.86	66.86
Titanium dioxide, anatase, reg., carlots lb.	.95	.95	.80
Xylene tanks, gal.	1.30	1.13	.78
BUILDING MATERIALS			
Lumber, 2x4 fir, mbf, cl	329.06	334.94	333.75
Lumber 2x2 pine, mbf, cl	319.52	319.18	326.35
Plywood, plyform, ¾", msf, cl	564.50	567.75	568.05
Plywood, ⅜", msf, cl	378.90	382.32	394.90
Cement, bulk, ton, tl	64.17	64.27	63.73
Sand, ton, cl	7.22	7.22	7.12
Ready-mix concrete, 3,000 psi/cu. yd., 15 cu. yd.	48.67	48.31	48.83
Crushed stone, 1½", ton, cl	6.75	6.75	8.31
Concrete blocks, sand/gravel, 8"x8"x16", per hundred	92.28	92.28	N.A.
Reinforcing bars, whse base; per cwt	20.85	20.85	19.67
Asphalt paving AC-20	108.96	114.39	140.30
Vitr. Clay Sewer Pipe, Prem Joint, 12", per ft, cl	7.26	7.26	6.98
Concrete sewer pike, 24", prem. joint, per foot, cl	17.73	17.73	N.A.
FUELS			
Crude oil (W. Tex Int Cush), bbl.	15.84	13.95	18.30
Diesel (reseller rack, Chi), gal.	.470	.463	N.A.
Fuel oil No. 2 (N.Y.), gal.	.496	.441	.563
Fuel oil No. 2 (Gulf spot), gal.	.458	.426	N.A.
Fuel oil No. 6 (N.Y.) contract cargo, bbl.	18.75	17.00	N.A.
Gasoline (reg lded NY), gal.	.498	.580	.491
Gasoline (reg unlded NY), gal.	.473	.560	.476
Kerosene (reseller rack, Chi), gal.	.518	.511	N.A.
Propane (Mt. Belvieu, Tex), gal.	.204	.195	.243
SCRAP MATERIALS			
Steel, No. 1, hvy., dlvd., Pitts., ton	111.00	114.00	106.00
Steel, No. 1 hvy., dlvd., Chi., ton	106.00	108.00	105.00
Copper, No. 1, East, wholesale buy, dlvd., lb.	1.230	1.170	1.015
Copper, No. 2, East, wholesale buy, dlvd., lb.	1.080	1.015	.925
Brass, red, East, wholesale buy, dlvd., lb.	1.190	1.130	.975
Brass, yellow, East, wholesale buy, dlvd., lb.	.525	.510	.405
Alum., old sheet/cast, E., wholesale buy, dlvd., lb.	.615	.610	.510
Alum., mixed clip., E., wholesale buy, dlvd., lb.	.720	.710	.585
Zinc, old, East, wholesale buy, dlvd., lb.	.24	.24	.20
Lead, clean solids, East, wholesale buy, dlvd., lb.	.270	.260	.265
Paper, No. 1 mixed, dlr., N.Y., ton	Nom.	Nom.	Nom.
Paper, old corrug. box, dlr., Chi., ton	10.00	15.00	25.00
Paper, old corrug. box, dlr., N.Y., ton	Nom.	Nom.	20.00
Old newspapers, Chi., ton	Nom.	Nom.	N.A.
Old white ledger, Chi., ton	75.00	80.00	N.A.

[Sources: Metals Week, American Metal Market, Engineering News-Record (20-city averages), The Wall Street Journal, Journal of Commerce, Chemical Marketing Reporter.]

Corp America bets on good year

The nation's top corporate executives are betting on another good year. Not only do they see demand moving up another 4% or so, but they feel this kind of gain can be achieved with a modest level of inflation.

The new findings (part of a near-400-firm survey by DRI/McGraw-Hill) suggest that the average price of manufactured goods will rise by only a shade over 3%—down a full percentage point from the estimate of the 1988 average advance made by these same companies just six months ago.

The 1989 price estimate also compares favorably with the latest government figures for 1988 which show industrial producer quotes rising about 3.5%.

The new study also has some modestly optimistic projections on plant and equipment spending. The 2.5% real spending gain suggested by the survey for the upcoming year is less than the pace of the past 12 months. But it's still in the plus column—and that's what counts.

Moreover, this estimate could prove to be on the low side. Reason: Traditionally, manufacturers have tended to underestimate capital outlays when business is on the rise. And that's why we lean more to the 6.4% advance projected by *PurchasingWorld* magazine's own economic consultant, Dr. Roger Williams (see story this section).

Another indication that upgrading of the survey estimate may be in order: Last year the original forecast for 1988 called for only a 2% gain—far under the final double-digit result.

Some further comments are also needed on the rather wide industry-by-industry variation seen by these major vendors. On the price side, there's the 5.4% advance projected for fabricated metals—probably a reflection of the basic metal increases of the past year. Chemicals are also slated for a somewhat larger-than-average 4.6% increase (see accompanying chart).

On the other hand, there could be some actual easiness developing, too. Nonferrous metal producers, for instance, just don't believe current inflated tags—for copper, aluminum, lead, zinc and a host of other metals—can hold.

Steel mills, meantime, look for a continuing—though more restrained—2.3% rise. This is pretty much in line with *PW's* own forecast (see PW Predicts).

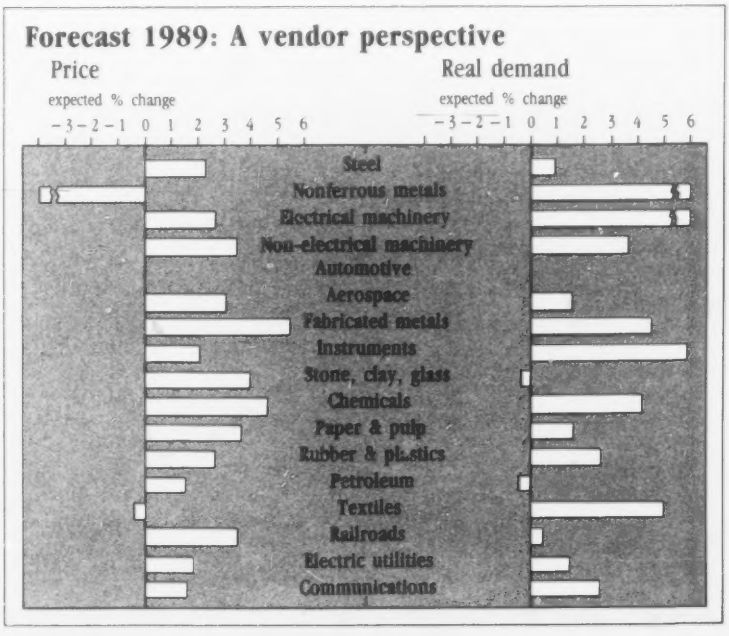
Also on the encouraging side are the near-level quotes seen for textiles and automotive industries. The latter is interesting in the face of the higher lists recently posted on new 1989 models—and probably reflects expectations of more rebates and financial inducements as the year wears on.

Transportation cost projections also point to no serious problems. The railroads are planning on only a 3.5% boost—and other modes (excluding air) put their increases around 2%.

A few words are also in order on the 4.6% increase projected for plant and equipment prices in 1989. Survey analysts feel this is unrealistically high—most likely because it does not take into account the higher quality equipment that is now being purchased. Make a quality adjustment to the outlays, and these prices will probably remain fairly level.

Also on the encouraging side are the near-level quotes seen for textiles and automotive industries. The latter is interesting in the face of the higher lists recently posted on new 1989 models—and probably reflects expectations of more rebates and financial inducements as the year wears on.

Finally it might be noted that industry-by-industry variations apply to demand as well as prices. Several industries will sport real sales increases well above the 4.5% average—most notably nonferrous metals, electrical machinery and instruments. Autos, on the other hand, will be lucky to equal last year's sales pace—and oil usage could actually fall by about 0.5%.



Buyers: Things look upbeat

PurchasingWorld magazine readers remain quite optimistic about the new year—even more optimistic than many business analysts, econometric models and Washington officials.

PW's annual "look ahead" survey suggests that industrial price inflation won't get any worse than it was last year. In fact, there may well be some deceleration in the rate of increase.

A similar upbeat pattern is indicated by PM answers to another query on how activity in their own firms is likely to fare in 1989. The response in a nutshell: quite good, with one out of every three respondents projecting gains of better than 5%.

Buyer attitudes are best summed up by one Sunbelt purchasing executive who observes: "Given the lack of any economic excesses and a somewhat better supply picture, there's little on the horizon to suggest any major near-term problems."

Here's what he and his counterparts around the country are currently anticipating for the next 12 months:

Prices: The average advance is put at just over 4%—a lot better than a year ago when these same readers projected boosts in the 5-6% range for 1988.

The lack of any acceleration is further confirmed by the fact that 37% of queried buyers expect price rises to be lower this year than in 1988. Add another 26% who expect the same rate of increase and it means that pricewise, more than three out of five expect to do as well as or better than they did last year.

To be sure, a fair number feels there could be some price acceleration in the second half *vis a vis* the first half. But a tone of moderation is set by the fact that the majority (56%) sees price hikes remaining on their slow steady upward pattern through the year.

Demand: The average demand gain is put at around 5.5%. At the other end of the spectrum, less than one out of five expects a decline in his or her firm's activity *vis a vis* 1988.

Equally encouraging, few see the economy slowing down as the year wears on. Quite the contrary. Nearly half feel second half GNP gains could top those of the first half—drowning out the minuscule 4% who feel some slowdown is likely after midyear.

Inventories: The fact that purchasing managers aim to keep stock levels lean also has to be regarded as a positive sign. Indeed, if PMs follow up on what they say, inventory/sales ratios for purchased materials may well drop. Reason: Despite the anticipated gain in activity, more buyers are now considering a drop in inventories than are considering new additions.

reason for the lack of any inventory buildup could be the anticipation of a better availability; for despite increasing demand, some 33% of queried PMs see a drop in lead-times—actually a bit above the 26% who are bracing for stretchouts.

That's not to say that everything will be coming up roses. About one out of every three respondents still looks for spotty tightness in some areas. The product lines mentioned most often are copper, aluminum, wire and steel, steel scrap, castings and forgings, paper products, synthetic fibers and caustic soda.

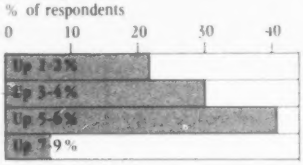
Whatever the supply/demand/price trends, purchasing executives are confident they can keep things running smoothly. Some of their strategies: More long-term agreements to assure reliability and bargaining leverage, more computer use and emphasis on Just-in-Time deliveries and stepped-up efforts to roll back some of the big raw material piece increases of the past year.

Other cost saving actions contemplated include extended price guarantees, more cash discounts for prompt payment, closer liaison with vendors and more value analysis. On the latter score, several PMs note that changes in cost and availability patterns have opened up big new opportunities in this area.

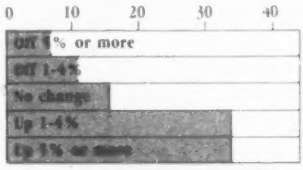
As an Ohio-based buyer puts it: "There's still a lot we can do to keep costs in the tolerable range. Sure, some increases are inevitable. But last year we managed to keep our advances about 1% under the national averages—and we mean to do the same in 1989."

How PW readers view the new year

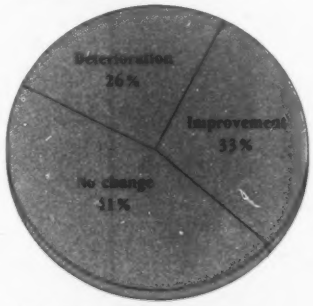
1989 prices



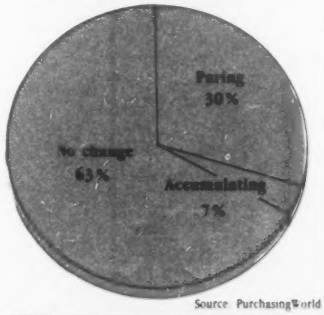
Company activity



Near-term inventories



Delivery performance



Source: PurchasingWorld

Don't let averages deceive you

Averages can be deceiving.

If there's any doubt on this score, at least as far as prices are concerned, take a look at DRI Price Forecasting Services' product-by-product rundown detailed in the table alongside.

While most analysts now agree that the overall near-term price trend won't be all that different from that of the past year, specific procurement items could vary all over the lot. The DRI forecasts for the year ending 4Q 1989 range from a close-to-10% advance (middle distillates) all the way to a double-digit decline (nonferrous scrap).

● **Energy:** Assuming the latest OPEC agreement holds together, a slow increase in oil from recent lows is anticipated. The average U.S. acquisition prices could run near $17/barrel over 1989, rising to $18.67/barrel in 1990 and $20.44 in 1991. Electricity rates should also climb moderately—at just under a 4% annual rate through 1990.

● **Industrial chemicals:** Strong demand and rather snug supplies should promote strong price increases over 1989—though some deceleration is likely in 1990 and 1991 as more capacity gradually comes onstream. Best bets at this time: Annual increases of 7.3% this year and 3.9% for both 1990 and 1991.

● **Steel:** Prices should remain stable and may actually weaken a bit for some products over the near term. Seasonal easiness in mid-1989 could drive down hot-rolled sheet tags, a product line which is expected to average out at near $452/ton over the 1989-1990 interval.

● **Nonferrous metals:** Copper should begin to cool off, but remain above $1/lb through mid-1989. A further modest downdrift to around 92-93¢/lb is seen by late 1990. Nickel, too, could drop, slipping to under $4/lb by the end of 1989. But the plating and alloying metal should stabilize after that—averaging in the $3.60-3.80/lb range over the 1990-91 period.

● **Machinery:** Good domestic and export demand—combined with somewhat higher input costs—will continue to firm prices. Thus the average 2.5% advance of last year will accelerate over the next 12 months to 3.2%—with an even bigger 4.1% hike seen for 1990.

● **Electronic components:** Prices will post relatively strong increases over the near term—advancing 4.1% in 1989, 4.9% in 1990 and 5.0% in 1991. But there will be exceptions, with such items as transistors rising at a much more modest under-2% rate. Behind the general bullishness in components: Expectations of continuing strong demand increases in communications equipment and computers—with production in the latter expected to rise 8.4% this year and 6.3% in 1990.

● **Construction materials:** Fabricated structural metal items will show decelerating gains as basic metal tags simmer down. Thus this past year's 8.7% gain in this area should slow to 4.6% this year and only 4.0% in 1990. On the other hand, non-metal areas should experience modest acceleration.

Price changes into 1990

(Comparison of fourth quarter pricing)

Product line	1988	% change 1989	1990
Raw materials, energy			
Low density polyethylene	36.5	9.2	7.4
Industrial chemicals	15.3	3.0	4.4
Soda ash	12.9	3.7	2.1
Processed fuels & lubricants	0.1	3.7	2.7
Middle distillates	-16.9	9.9	8.3
Metals			
Cold rolled carbon sheet	2.0	3.7	6.3
Galvanized carbon sheet	5.1	-3.9	2.0
Carbon steel plate	14.0	0.7	4.4
Alloy casings (OCTG)	4.3	6.6	3.9
Steel mill products	6.4	3.7	4.0
Nonferrous metals	12.9	-6.7	3.7
Nonferrous scrap	13.9	-21.4	10.3
Nonferrous shapes	17.8	-1.0	5.4
Components			
Adhesives & sealants	9.1	8.1	6.4
Speed changers, drives, gears	4.1	4.7	5.1
Semiconductors	1.6	2.8	1.9
Microprocessors	-4.7	-2.9	-4.1
Laminated plastic sheets	7.6	2.1	3.4
Pulp, paper & products	9.4	3.1	3.8
Bolts, nuts & screws	4.6	4.7	6.1
Electronic components	3.2	4.1	5.2
Relays	5.3	5.9	5.0
Transistors	-1.2	1.8	1.9
Construction			
Reinforced concrete pipe	0.6	4.0	3.4
Mat'l components for construction	5.0	3.2	4.3
Fabricated structural metal products	8.8	3.4	4.3
Concrete products	1.2	2.8	3.2
Gypsum products	-10.3	2.6	3.8
Asphalt products	2.4	2.9	6.6
Machinery			
Turbines & generator sets	5.6	5.0	5.4
Heating equipment	5.5	4.8	3.4
Fans & blowers	4.8	6.2	6.6
Oilfield machinery	3.8	4.4	4.6

Source: DRI Cost Forecasting Services

Econometric models: growth won't stop

Growth may slow down a bit, but it's not about to stop—not over the next 12 months and not even in 1990.

So say the nation's major econometric consulting firms, which see the nation's output of goods and services advancing at a 2-2.5% rate in real terms over the next two years (see table). True, that's not nearly as robust as the 3.8% rate of the last year, but it's not all bad considering the fact that 1989 and '90 will be the seventh and eighth straight years of business uptrend.

These projections, based on a survey of three key mathematical-oriented models (DRI, Wharton and Merrill Lynch) also suggest that recent talk of substantially higher price levels has to be taken with a grain of salt.

Specifically, three widely monitored measures of inflation are examined. And all three, while showing some price acceleration from 1988 levels, remain in the tolerable range for 1989, with no further increases anticipated for 1990.

In any case, there's agreement on 1989 among the three models as far as the all-inclusive GNP deflator is concerned. The actual estimates vary in the narrow 3.9-4.6% range (about one percentage point above 1988 levels). And for the two models where 1990 estimates are available, the figures converge around the 4.2% mark.

Equally close agreement is seen in consumer prices, where increases are expected to hover around the 5% level in both 1989 and '90—again up about one percentage point from 1988's average.

One factor likely to temper any upward price pressure is the small gain seen for industrial production this year and next. Both years will show about 2.5% advances—levels that suggest reduced supply/demand pressure on the industrial price level.

These industrial quotes (not shown separately on the table) are also likely to benefit from relatively tolerable increases in unit labor costs—as much of the expected increase in payrolls is offset by continuing manufacturing productivity gains.

How good are these econometric models in predicting? Pretty good on the price front—judging from their 1988 track record. Certainly the 3.6% prediction on the GNP deflator (made a year ago) was pretty much in line with the now-estimated 3.3% actual result.

The models' cost of living projections have also been on the money: The 4.4% projection made a year ago comparing to an actual reading of about 4.1%.

The forecasts are not that much off the mark in the volatile interest rate area either: The original 8.7% projection for the prime rate compares to a 9.3% actual reading.

Next year the average borrowing cost is put at around 10%. But there's considerable variation about this number, as the Wharton and DRI estimates of around 10.5% are offset by a Merrill Lynch projection of about 9%.

Asked to explain its relatively low figure, a Merrill Lynch spokesman attributes it to a temporary flattening of the GNP growth curve after mid-1989. This, he adds, should force the Fed to drop the prime rate from current double-digit levels to near 7.5% by the fourth quarter of the year.

The econometric models look ahead

Real GNP (% change)	1989	1990
DRI	2.5	1.6
Wharton	2.4	2.4
Merrill Lynch	2.2	NA
AVERAGE	2.4	2.0
Industrial production (% change)		
DRI	2.6	1.6
Wharton	2.6	2.9
Merrill Lynch	3.1	NA
AVERAGE	2.8	2.2
GNP price deflator (% change)		
DRI	3.9	4.2
Wharton	4.2	4.2
Merrill Lynch	4.6	NA
AVERAGE	4.2	4.2
Finished producer prices (% change)		
DRI	5.1	4.8
Wharton	3.7	2.6
Merrill Lynch	4.7	NA
AVERAGE	4.5	3.7
Consumer prices (% change)		
DRI	5.0	4.9
Wharton	4.7	4.7
Merrill Lynch	5.0	NA
AVERAGE	4.9	4.8
Prime interest rate (%)		
DRI	10.6	9.9
Wharton	10.3	9.7
Merrill Lynch	9.1	NA
AVERAGE	10.0	9.8
Unemployment rate (%)		
DRI	5.4	5.8
Wharton	5.5	5.8
Merrill Lynch	5.7	NA
AVERAGE	5.5	5.8

Business committee surveys 1989

The prestigious NAPM Business Survey Committee is accentuating the positive—citing increased exports, strong capital spending, and moderating inflation as factors pointing to what it sees as another very good year.

At a New York press conference last month, the committee reported that, on the inflation front, the more than 250 purchasing executives surveyed project a net average price increase of 3.7% in 1989—down from the 5% advance reported for the year just ended. Moreover, some 72% of those queried see these increases as selective rather than across the board—with an even more impressive 94% expecting them to be slight or moderate rather than severe.

Commenting on prices, Robert J. Bretz (chairman of the NAPM committee and director of materials management for Pitney Bowes) feels several factors are behind this relatively optimistic inflation projection. For one, he cites the huge run-up in raw materials last year that allowed vendors of these materials to more than catch up with costs.

Two other factors noted by Bretz: 1) A rise in production capacity which should more than match relatively modest increases in demand and 2) a U.S. dollar level that still provides opportunities for overseas sources to sell here at attractive prices.

Some of the other key findings of the just-released survey:

- **Activity:** Purchasing managers see the first half of 1989 topping the last six months. And while some deceleration in the rate of gain is anticipated after midyear, more than half (54%) see 1989 as better than 1988—with another 33% anticipating a relatively level pattern and only 13% fearful of a decline.
- **Capital spending and operating rates:** The trend toward more capacity noted above is likely to continue—as 42% of queried PMs see their firms upping plant and equipment outlays—almost double the 24% who plan on declines.

Also indicative that availability problems may be peaking: The number of firms operating at 90% of capacity or more has held steady at 58% over the past six months—in marked contrast to the sharp climb of the previous few years.

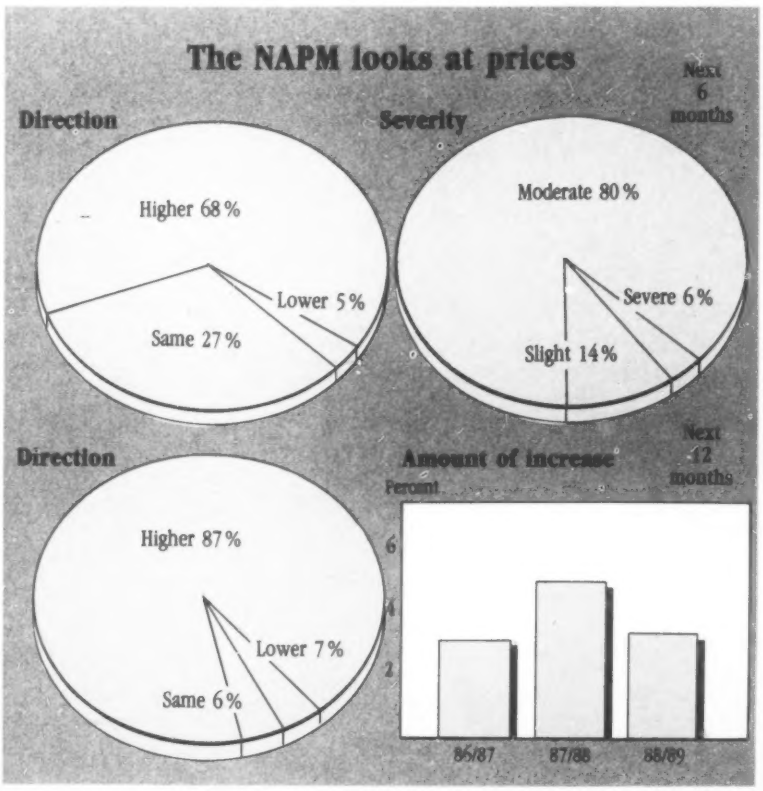
- **International trade:** Some 52% of surveyed firms expect a moderate increase in exports over the next six months. Another 5% see a substantial increase and only a minuscule 4% are talking about cutbacks here.

Imports, meantime, should inch ahead—confirming Bretz' previous remark about the continuing availability of overseas bargains in some areas. In any case, 31% plan on some increases in incoming shipments over the next six months—more than double the 13% who feel import totals could shrink a bit.

Purchasing executives' basic optimism is further backed up by the fact that some 48% are satisfied or optimistic about the next 12 months—up from the 42% reading of a year ago when a similar question was asked about 1988.

That's not to say that there aren't concerns—namely about interest rates, the budget deficit, vendor deliveries, and even inflation. But most PMs don't see these as presenting any insurmountable near-term problems.

The outlook is best summed up by Bretz: "Overall, purchasers feel that 1989 will be better than 1988—and 1988 was a good year."



...Continued from page 27

productivity in some of the product lines that caused bottlenecks this year.

PW: The impact of this on prices?

Behravesh: These factors should help to alleviate availability problems and ease price pressures on some of the basic materials that have seen big price hikes last year. However, more finished products will get their price push this year as some of this year's input cost increases are passed through and labor cost pressures intensify.

PW: How will the dollar fare?

Behravesh: The dollar will continue to slide. As long as the trade deficit remains large there will be continued downward pressure on the dollar. The dollar will depreciate another 5%-10% in 1989.

PW: Any further improvement in our trade balance?

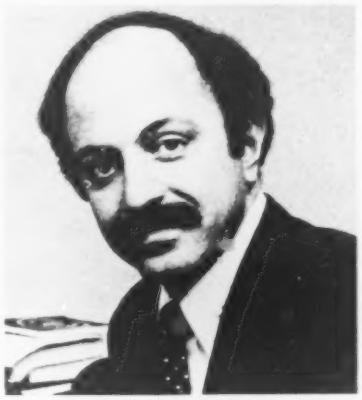
Behravesh: The trade deficit has improved dramatically in volume terms and the improvement will continue. The lower dollar means that U.S. goods are now very competitive in world markets. The cheaper dollar also means that imported goods are more expensive. The higher price of imports offsets some of the volume improvement in trade, so in dollar terms the improvement in the trade deficit will be very modest.

PW: Any progress in balancing the Federal deficit?

Behravesh: Improvement will come slowly. But it is possible for Mr. Bush and the Congress to come up with a package that could cut the deficit by $25-$30 billion a year over the next few years. This could balance the budget by the mid-1990s without triggering a major slowdown in the economy.

PW: Which industries will be strongest in 1989?

Behravesh: This time last year we talked about a good 1988 for the machinery industries, due to a rebound in domestic capital spending and a surge in exports. That good year materialized and even surpassed our expectations, particularly in the demand from overseas. The story for 1989 should be very similar with the capital goods industries expected to lead the pack in growth once again.



Dr. Nariman Behravesh

PW: Which industries will be weakest?

Behravesh: The nondurable goods industries in general will see slower growth than will durables. Textiles and apparel will be particularly flat due to slowing consumer demand and stiff import competition. The domestic auto industry will also likely see little if any growth in 1989, for the same reasons. The housing market will be off its 1988 pace due to rising interest rates, so many building suppliers will see reduced activity.

PW: What are your long-term projections?

Behravesh: Over the next ten years real GNP growth will average about 2.5% and inflation will average about 4%. The relatively modest growth is the result of slower labor force growth and decent but not spectacular gains in productivity.

PW: Which industries will fare best over the next decade?

Behravesh: The strongest growth over the coming decade will be concentrated in a) the high-tech industries, such as computers, electronic components and communications, which will see growing applications of their products in all areas of the economy; b) the machinery and industrial construction industries, which will benefit from relatively strong capital spending and c) industries, including machinery, chemicals, and paper, which can take advantage of the weaker dollar in export markets around the world.

PW: Which industries will be weakest?

Behravesh: Slow growth will be seen in some obvious problem sectors, such as leather, which has lost its markets to other materials and to imports, and energy (particularly crude petroleum and natural gas mining). Some of the agricultural sectors, including fertilizers, also will be weak, and many of the housing-related industries will be hurt by changing demographic trends.

PW: Any advice for buyers?

Behravesh: In the near-term the risk of inflation is greater than the risk of recession which means that purchasing executives should keep their sourcing options as flexible and open as possible. In the medium-term the risks of a recession are greater given the age of this recovery. This means more need to remain vigilant about inventory levels. The weaker dollar also suggests the possibility of more domestic sourcing for materials and supplies that are currently being imported. These U.S.-made products will become more and more price competitive over the course of 1989.

Forecast '89
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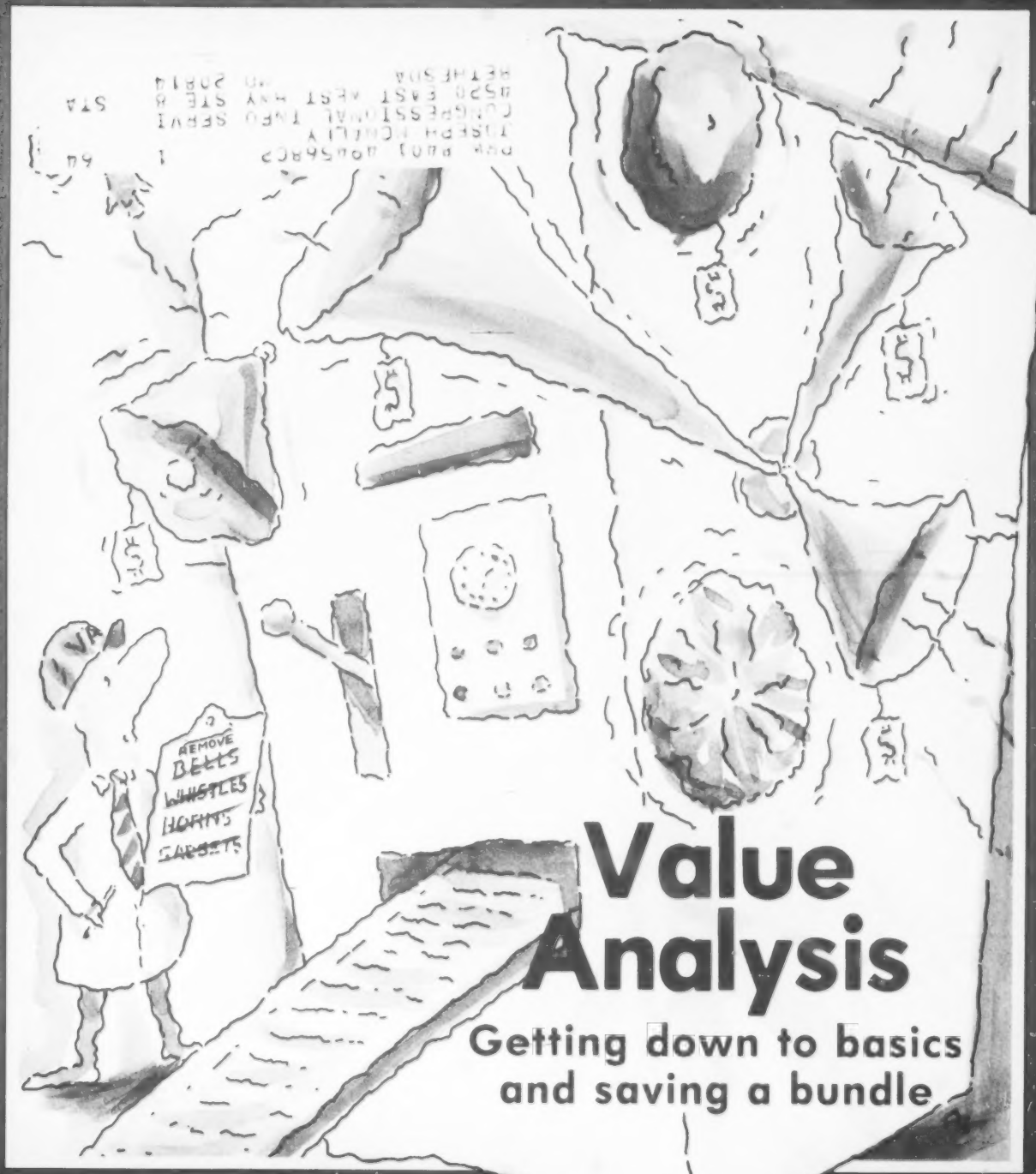

Value Analysis

Getting down to basics and saving a bundle

bar coding adds speed, accuracy

Transportation: make or buy • Dangers of downgrading purchasing

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by Robert S. Reichard, editor-in-chief

Rate of price increases slows

The pace of price increases seems to have slackened off a bit over the past few months.

Thus the bellwether NAPM Business Survey Committee reports that only 39% of its 250 members were socked with boosts over the latest 30-day period. While hardly Nirvana, this has to be regarded as good news—it represents the sixth consecutive month that the rate of advance has been slowing down. More to the point: The NAPM diffusion index for prices (where 50 is the neutral point) has dropped to 68.4—some 16 points under the 84.5 peak hit this past spring.

The deceleration in the overall inflation rate is also confirmed by the government's comprehensive industrial producer price index. Increases here over the past few months have averaged out at less than 2% at annual rate. And while it would be unrealistic to expect this rate of advance to continue, it does seem to knock the slats out from under the gloom-and-doom mongers who continue to project bigger-than-1988 price boosts for the new year.

Results of a new survey of some 38 top economists also has to be regarded as encouraging. True, the average estimated increase for 1989 seems high, but that's because the focus is on the cost-of-living index which traditionally runs ahead of industrial prices. The point to keep in mind: The 5.0% annual rate seen for both the first and second half of 1989 is basically unchanged from the 4.8% figure recorded over the past six months.

The presitigious Organization for Economic Cooperation and Development (OECD) is also optimistic. Looking at the all-inclusive GNP price deflator, the group puts the U.S. advance at only 4.5% this year—actually a fraction under the 4.75% seen for all of Western Europe.

Why the continuing price restraint? One factor has to be the lack of any big jump in wage inflation—probably due in large part to lingering worker concerns about job security. When push comes to shove, workers are still fearful, and are willing to accept less than they might otherwise have demanded. Lest there be any doubt on this score, take a look at latest Labor Department estimates which show the hourly pay level for production workers up by less than 2% in 1988.

Another factor behind wage restraint could be declining labor clout. Only 17% of the nation's wage workers are now unionized—significantly under the 23% figure which prevailed as recently as 1980.

The talk about a capacity crunch fueling a new wave of inflation also seems overdone. As the story on page 14 suggests, the high point in factory operating rates may already have been reached.

But even current utilization rates may not be as troublesome as first blush might indicate. For one, the government capacity yardstick may have become outmoded—or at least it doesn't have the same meaning it once did. That's because computerization and restructuring have made American manufacturing much more efficient than it was a few years ago. It is becoming increasingly clear that industry can now raise factory utilization levels higher than previously thought before hitting production bottlenecks.

Here comes more paper

Good news for paper and paperboard buyers: A fair amount of new capacity is on the way—suggesting that the worst of the 1987-88 supply pinch may be coming to an end.

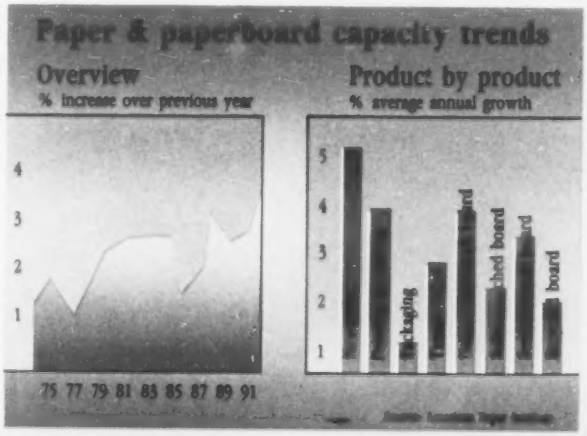
New American Paper Institute (API) figures, for example, indicate that about 2.8% will be added to industry production potential during the current year. And 3.5% and 3.7% advances are scheduled for 1990 and 1991, respectively (see chart).

All told, construction of new mills and other improvements should be adding 8,249,000 tons to the industry's manufacturing base over this three-year period. This, in turn, should boost potential output to near 88,564,000 tons by 1991.

This is probably more than any likely increase in paper and board demand over this same time span. Demand should advance at only a 2-2.5% rate over the next few years-0- slightly under the 2.5-3% GNP increase anticipated. This kind of paper/GNP lag is considered normal for the latter stages of a business upturn.

Next, superimpose this 2-2.5% demand rate on an average 3.3% rate of capacity addition through 1991—and some drop off in mill operating rates seems quite likely.

This doesn't mean that rates will fall through the floor; it suggests a slow decline from the 97% average of 1988—a year which saw even higher rates for kraft linerboard and semichemical board (100-101%), newsprint (100%), and coated papers and uncoated free sheet (98%).



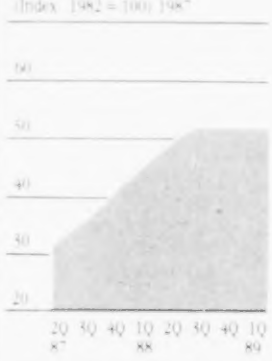
Aluminum supplies improve

A slowly improving supply situation should keep prices under wraps. Some declines are a distinct possibility by spring or summer—particularly now that the threat of a big U.S. strike has been eliminated. And a lot of new capacity is coming onstream in Australia, India and Venezuela. On the other hand, with producer inventories at historical lows (less than a 3-month supply at latest report), any near-term easiness should be quite modest—with ingot unlikely to drop under $1/lb. Demand could put a floor under prices. U.S. producers now predict a 2% increase in shipments—on top of last year's 3.4% advance.

Inventory corrections in components

End-user inventory corrections will be slowing demand this year. Semiconductor shipment gains could fall under 5% in 1989—far under the 25% increase of the past 12 months. This, in turn, will lead to some semiconductor price erosion. Digital ICs could fall almost as fast as they rose in 1988, as memory and logic chips become more abundant and manufacturing capacity increases. Best bet: About a 7% decline in the average semiconductor tab over the year. As for passive components: The demand decline will be smaller—from 10.5% in 1988 to 7% in 1989—and prices here could continue to increase, albeit at a slower rate than in 1988.

Electronic component prices



Copper average coming down

Markets continue nervous—though fundamentals seem to point to some fall-off from recent peak levels. On the availability front, for example, Free World mine capacity is expected to rise by almost 5% this year. And this will eventually reverse the recent inventory downturn—with some modest buildup likely after midyear. This is supported by one producer group which now puts 1989 refined production at 8,384,000 mt—about 180,000 above anticipated consumption. While it's hard to predict month-to-month price changes, the feeling is that the average quote this year could come down to $1.20/lb. That's under current levels but little changed from last year's average.

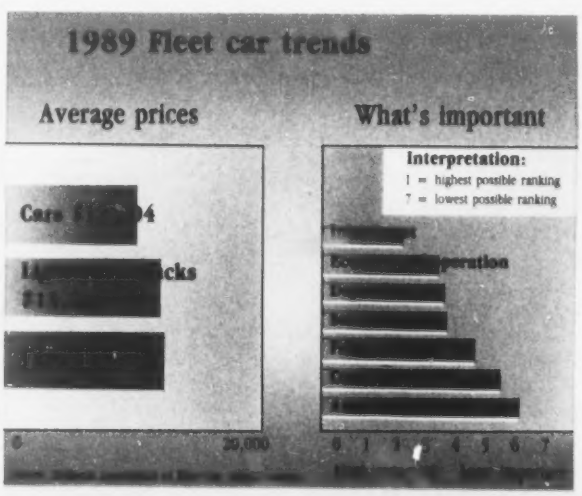
Fleet managers speak out

Figure on the average 1989 model fleet car costing around $12,800—with outlays for light-duty trucks and vans put in the $13,500 range.

So say some 476 transportation managers responding to a new National Association of Fleet Administrators survey. They also note that initial cost is the primary consideration when making their choices—though several other factors also play an important role—most notably economy of operation, depreciation and serviceability.

Other key findings of the study:

- **Imports:** Foreign makes don't figure very heavily in fleet plans. Indeed, overseas models are expected to account for less than 1% of total purchases this year.
- **Lease/purchase:** Some 49% of current fleet vehicles are leased, 51% purchased outright. Generally speaking, commercial fleets tend to lease more than public service ones. Also, survey responses suggest a slight shift toward leasing during the new year.
- **Size and type of vehicle:** An overwhelming 92% contemplate no changes—though comments by the remaining respondents suggest a slight shift over from mid-size to compact models.
- **Make of vehicle:** A surprise here—year-to-date purchases show Ford with 30.3% of the market—not much under the 34.0% noted for GM. The remainder: Chrysler (18.1%) and unspecified or imports, 17.6%.
- **Options:** The items fleet managers generally would like include power brakes, automatic transmission, dual side mirrors, power steering, air conditioning, tinted glass, all-season tires, floor mats, rear defroster, fuel injection, pulse wipers and AM/FM radio. All except compacts are preferred with 6-cylinder engines.



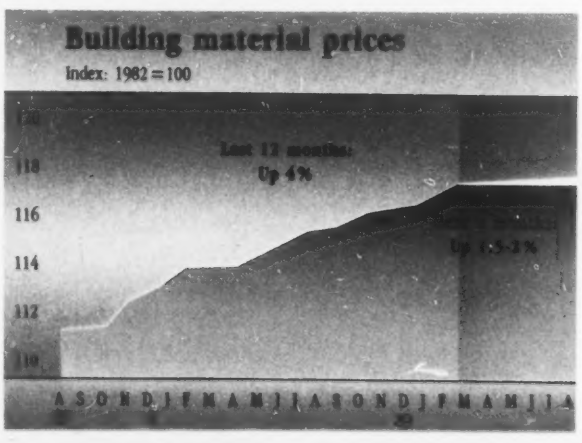
Building materials: good news

CURRENT SITUATION: The industry is coming off a good year—thanks to a fairly strong demand and ample supplies. **Prices haven't been much of a problem for buyers—at least not on an overall basis, where averages moved up only 4%** (in line with the general inflation rate). There were exceptions—most notably in wire and cable and structural steel where increases of 31% and 14%, respectively, were reported. Higher-than-average boosts were also noted in plastic construction products (12%) and sheet metal products (9%). Lumber and cement tags remained pretty much unchanged.

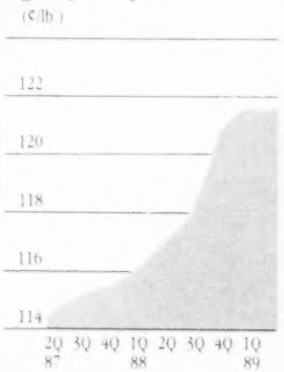
DEMAND: Some falloff seems inevitable as higher interest rates impact negatively on building activity. Right now construction looks to drop a few percentage points in real terms—and this will slow purchases of most materials **Softwood lumber** consumption could be down as much as 6% as housing starts slip by a similar amount. Less housing also means reduced demand for **roofing materials, gypsum and plumbing fixtures.** The Portland Cement Association is also bearish—projecting a 5.2% drop in 1989 **cement** consumption. And a bigger than 15% fall in commercial construction suggests sizable declines in purchases of **structural steel shapes.**

SUPPLY: No problems are anticipated. Given the above demand forecast, there should be more than enough to go around in most areas. **But major gluts should be avoided.** A sampling of operating declines (based on Wharton Econometric projections) points to **only 2-4% utilization. Slippage in such key areas as lumber an wood, building material and wire, and paving and roofing products.** Cement should not be hurting—as the projected demand falloff is offset by lower imports and the absence of any big capacity additions.

PRICE OUTLOOK: The news is good. The overall advance for 1989 will be a bit under 1988 levels. **And substantial deceleration is seen for sectors which last year experienced big runups. Wire and cable prices should be off as much as 6%. Only small boosts are anticipated for plastic construction products (3%), structural steel shapes (2.5%) and steel metal products (3.5%). True, cement will rise about 2.5%** (*versus* 1988's no change).



High-density polyethylene



HDPE prices hold

Temporary voluntary allowances have wiped out a new 1-3¢/lb. increase. Upshot: Injection and blow-molding types are holding the 52-53¢/lb. range. Part of the softness stems from weak demand. But another factor could be producer concern about polypropylene—a resin which is softening and already has a competitive edge over HDPE. An 8-9% capacity increase (about 3-4 percentage points above expected demand gains) could be another price rise inhibitor. And still another 9% boost in production potential is scheduled for 1990.

Steel softening

Some softness has developed with several percentage points being chopped off flat rolled spot prices. This, in turn, just about rules out implementation of the $15-30/ton hikes that had been scheduled for earlier this year. True, contract quotes are up *vis a vis* 1988. But the average realized price hike for the year as a whole is likely to be quite modest—no more than 4% (half the estimated 1988 advance). One reason for the moderation: An expected drop in demand, with domestic shipments for 1989 likely to fall into the 78-79 million ton range—about 5% under last year.

Facsimile machines boom on

Last year's booming market is spilling over into 1989. A new Computer and Business Equipment Manufacturers Association (CBEMA) projection puts this year's total sales at between 1.6 and 1.7 million units—up some 47% from 1988 levels. And that's on top of last year's huge 91% increase. But despite this surging demand, unit prices should continue to decline. This year the average machine is expected to go for only $2,035—down 11.5% from last year's $2,300 estimate.

Copiers continue price decline

CBEMA forecasts here are for somewhat more subdued demand increases. Thus the overall advance seen for 1989 is only in the order of 6%—as totals read 1.34 million units. But average unit prices here will continue to decline—about 4% from $3,749 in 1988 to $3,601 for 1989. This follows a similar decline for the year just ended.

Pneumatic tool demand increases

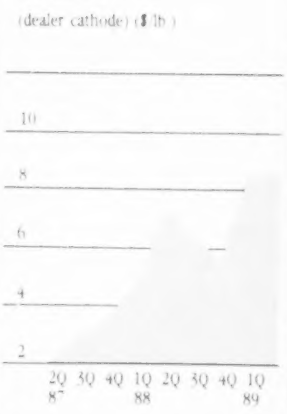
Budget for about a 7% increase in average prices this year—with this estimate equally applicable to tools destined for the auto, industrial and construction markets. One factor: Demand has been increasing—thanks in large part to the soft dollar. Then, too, there's the need for toolmakers to shell out hefty sums to improve quality, introduce new manufacturing processes, and retool for new products.

Industrial gas prices increase

Reductions in discounts announced in mid-1988 have been followed by new increases effective the beginning of the year. These new boosts are expected to hold up as demand continues strong—with volume totals holding steady after the 4% and 3% advances of 1987 and 1988, respectively. Oxygen, nitrogen, and hydrogen continue to be the big volume markets—though demand for the latter has eased because of reduced aerospace activity. Smaller volume argon is up because of the electronics surge.

No price fall for nickel

Hopes of a continuing price fall have been dashed. Blame the recent rally on production problems both here and abroad. Another



factor: Buying in recent weeks has been stronger than anticipated—as users move to build up depleted inventories. Upshot: Market tightness which is now expected to persist for at least another few months. This, in turn, could make for further near-term boosts—though some weakening is possible over the medium term (spring) as markets come back into somewhat better balance. Also indicative that the current surge is temporary: Domestic primary consumption in 1989 is put at only 132,000 tons—some 3% under 1988 levels.

Zinc and lead

The sister metals are going in opposite directions. Zinc continues to climb, with prices in late January moving into the high 80¢/lb. range—about 7¢/lb. above late 1988 levels. Lead, on the other hand, has dropped 2¢/lb. over the same time span—to near 40¢/lb.—with much of the downward impetus stemming from mild weather which has adversely affected battery maker demand for the heavy metal.

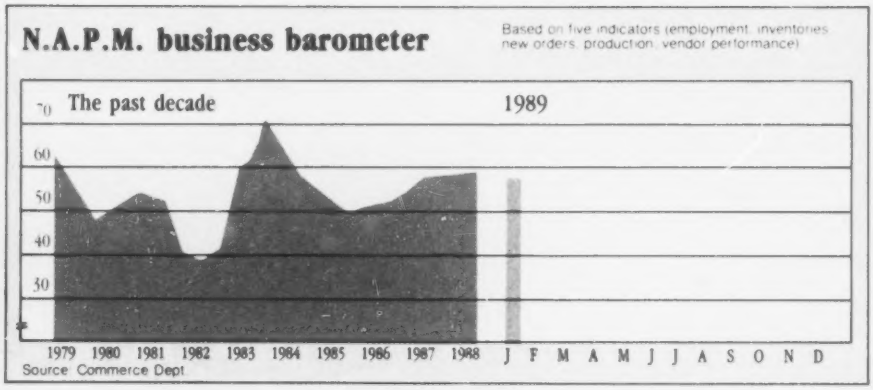
Plastics prices stabilizing

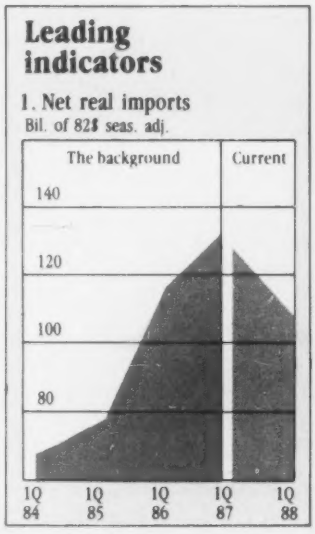
CURRENT SITUATION; Prices, which have been the big problem over the past year, are finally beginning to show signs of stabilizing. Boosts have just been announced by polyethylene (PE) producers, but several other commodity resins have turned a bit softer, with small declines reported for polypropylene (PP), polystyrene (PS) and polyvinyl chloride (PVC). There's little indication of another 1988, when averages jumped 15%.

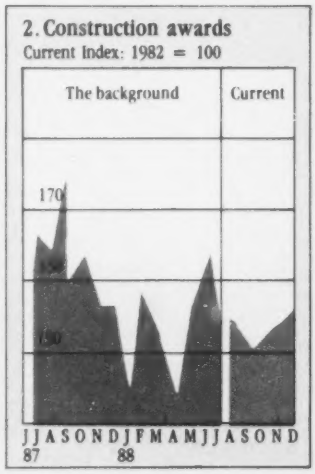
DEMAND: All signs point to about a 4% increase in overall tonnage this year—just a shade under the near-5% advance estimated for 1988, but enough to push totals near $38 billion. All major thermoplastics should share in the 1989 gain—with PP's 6% tonnage increase leading the pack. Other projected advances: HDPE (5%), PS (4%), LDPE (3%), ABS (3%) and PVC (2%). Relatively good (above GNP) growth is also expected for the longer pull—**with advances continuing to average near 4% yearly into the 1990s.**

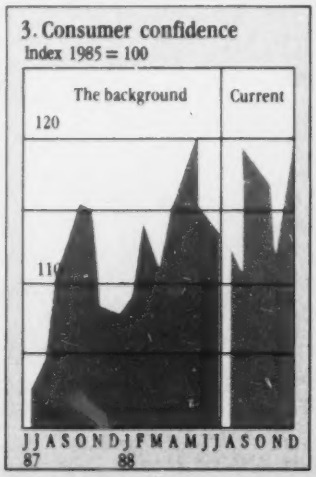
SUPPLY: The 1988 pinch is just about over. Plans call for an impressive 8-9% increase in production potential over the new year—with an almost-as-large advance already scheduled for 1990. Biggest chunks of new capacity this year will be in PP (nearly 13%) and PS (11%)—enough to make for substantial declines in these resins' operating rates—from 88-89% last year to 83-84% during the current 12-month period. Bigger-than-demand capacity boosts are also slated for LDPE (6%), HDPE (8-8.5%) and PVC (7%). Upshot: Modest 3-4 percentage point drops in these three resins' operating rates—to 91, 94 and 88%, respectively. Only ABS will buck this trend as unchanged capacity in the face of demand gains raises operating rates two percentage points (to 81%).

PRICE OUTLOOK: Best bet for the next six months: A 2.5-4% overall rise—with the year as a whole up by a slightly higher 6%. The increase—in the face of increasing supply—will in large part be fueled by higher feedstock costs. Not all resins will follow this pattern: PP, for example, could see some significant erosion by mid-year as new capacity comes onstream. But any easiness in PE where 90%-plus operating rates are envisioned, will have to wait until 1990.


N.A.P.M. business barometer
Based on five indicators (employment, inventories, new orders, production, vendor performance)
The past decade
1989
70
60
50
40
30
1979 1980 1981 1982 1983 1984 1985 1986 1987 1988
J F M A M J J A S O N D
Source: Commerce Dept.







KEY ECONOMIC TRENDS

Business upturn continues

Still no sign of letup in the now more than six-year-old business upturn. Virtually all broad-gauge economic barometers are now solidly in the plus column. Examples:

NAPM business barometer: The latest 58.1 reading (50 is neutral) is actually above the previous month and at the highest level since last summer.

New orders: Totals, as reported to the Commerce Department, are still rising—with the most recent figures (in current dollar terms) running a solid 9% ahead of a year earlier.

Business confidence: Sales expectations for the current quarter, based on a new Dun & Bradstreet survey of leading manufacturers, remain at historically high levels. An impressive 73% of queried outfits expect gains *vis a vis* a year ago while only 4% see the possibility of a decline.

The D&B findings also support a general feeling that inflationary prices are under control at the moment. More to the point: Only 43% of responding manufacturers say first quarter 1989 prices will be higher than a year ago. That's some three percentage points under levels reported three months ago when the same question was asked.

Coming back to new orders, economists are especially encouraged by the latest 3% increases in nondefense capital goods bookings. If nothing else, it suggests that plant and equipment buying is still in high gear.

This positive capital investment appraisal is also supported by a new Commerce Department survey which points to a 6% increase in 1989 outlays—not that much under the previous year's 10.4% spurt.

The foreign trade picture also indicates near-term buoyancy, as exports increase and imports continue to shrink. In any event, the net real import balance (imports less exports) has dropped a resounding 44% from 1986 peaks.

This trend, detailed in the chart at right, can't be underestimated. Other things being equal, the more this net real import figure drops, the more work there is for U.S. manufacturers—in supplying both domestic and foreign demands.

Even the construction sector seems to be holding up well in the face of rising interest rates. Thus contract awards, a lead indicator of actual building activity a few months down the pike, seem to have stabilized at fairly decent levels (see chart).

This construction buoyancy is widespread, with only office and other commercial projects continuing to disappoint. On the other hand, industrial projects remain a major source of strength. And even residential building is doing okay—though some falloff here has to be anticipated as mortgage rates continue to edge up.

Perhaps the most positive sign of all—as far as near-term activity is concerned—is continuing consumer confidence. As the chart on the right indicates, this key barometer remains close to recent peaks.

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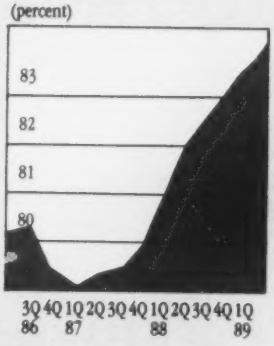
Operating rates level off

The overall trend



Industry-by-industry

(% point change from year earlier)

Primary metals +3.8
Fabricated metal products +5.6
Non-elect. mchy. +7.0
Elect. mchy. +1.8
Automotive +5.0
Instruments +3.3
Textile mill products −4.7
Paper & prod. +0.3
Chemicals & prod. +6.0
Petroleum prod. −4.5
Rubber & plastics −0.2
Utilities −0.2

...Continued from page 13

Even autos look to be holding up well. Right now the betting is that 10.4 million units could clear the market over the new year—not that much under the 10.6 million sold in 1988.

To sum up, there's little or nothing to indicate any imminent slowdown in overall business activity. Backing this up is a recent survey of 38 top economists. Their finding: Real GNP should advance at a 3.6% annual rate over the first six months of the year—not all that different from last year's 3.9% average increase.

Operating rates approach 85%

Factory operating rates are approaching the critical 85% point—a level where bottlenecks have traditionally tended to appear.

But there's no need to push the panic button this time around. Rates are probably as high as they're going to go—at least on an overall basis—as industrial production gains slow down and new capacity comes onstream at a somewhat faster clip.

The plastics, chemicals and paper industries all plan on substantial additions to production potential over the next few years. And steel rates have already begun to ease.

How factory utilization numbers move could also impact on prices. It's no coincidence that the industrial sectors showing the biggest increases in factory utilization over the past year also exhibit some of the biggest inflation advances. Metals and chemicals are good examples.

Paper industry inflation can't be explained away by a rise in paper utilization rates. But that's only because rates here were already at peak levels last year and hence were physically unable to rise.

At the other end of the spectrum are big operating rate declines in petroleum products and textiles. This could be part of the reason why prices in both these areas have been on the shaky side over the past few quarters.

Where do we go from here? As suggested above, the operating rate peaks in most sectors have probably been reached. Any downslide should be extremely gentle—with the overall utilization figure edging down to only 83 by next fall.

That's a step in the right direction as far as availability and prices are concerned. But keep in mind this is nowhere near the 79% utilization rate low which prevailed as recently as 4Q 1986.

CURRENT PRICES

Industrials tick up

A slight uptick in industrial price increases over the past month is not to be taken too seriously. Look at changes over the past three months—a much more meaningful time period—and the increases remain quite modest, averaging out at only slightly above a 4% annual rate.

A good part of the latest month's spurt can be traced to the energy sector where the recently inked OPEC agreement helped propel crude petroleum prices up. This, in turn, sparked advances in residual fuel, jet and diesel fuels, home heating oil, natural gas and electric power.

These more than overwhelmed slight declines in liquid petroleum gas and gasoline. Moreover, the drop in the latter should be regarded as seasonal—as winter reduces driving and hence the demand for fuel.

Chemicals also helped in making for the latest overall rise—as both inorganics and organic types continued to advance. Also up were fertilizers and inedible fats and oils. On the other hand, plastic resins took a breather—actually falling a bit after the steady round of hikes of the recent past.

Paper products, too, continue to edge up—with new increases noted for both corrugated and fine papers. But with a lot of new capacity coming onstream, increases here should begin to decelerate in the quarters ahead.

One surprise: The failure of capital goods increases to speed up. They're still coming in at about a 3.5% annual rate—little changed from recent fall levels. About the only noteworthy boosts here occurred in transformers, motors and generators.

Moreover, the latter should be regarded as an aberration, as increases here over the past 12 months have come to only 2.5%. Most forecasts suggest continued restraint here in 1989—led by some actual declines in computers, fax machines and even copiers.

Construction material tags also remain under control. True, there were a few boosts—namely in wire and cable, fabricated structural metal products, and plywood. But these were effectively offset by easiness in gypsum products, plastic construction products and softwood lumber.

Somewhat more disturbing was the continued run-up in metals. True, steel mill tags softened. But overall averages continued to rise, as copper, aluminum, and zinc all headed for higher ground.

This metal upturn may be ready to run out of steam. Copper, for example, is beginning to top out. And most analysts see a similar softening in most other nonferrous areas.

PROCUREMENT STATUS REPORT

Leadtimes mark time

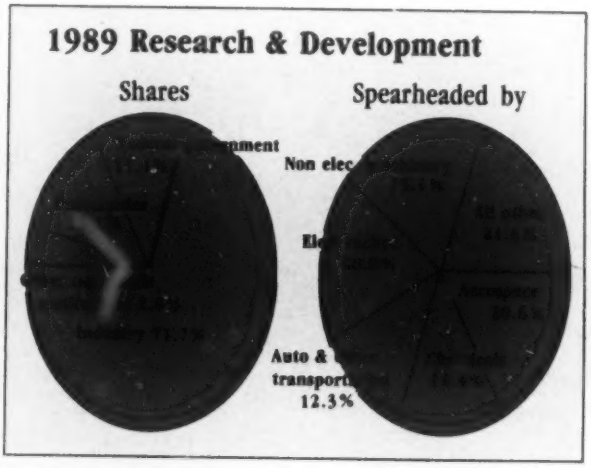
The news on the procurement front remains basically upbeat. Thus despite still-increasing factory activity, leadtimes continue to mark time.

PurchasingWorld magazine's exclusive leadtime index remains squarely on the neutral 50 mark—indicating that stretchouts and shrinkages are balancing. And the NAPM delivery/slowdown measure tells pretty much the same story—with the index (54 at latest report) holding well under the 65-plus peaks of this past summer.

Also indicative that things are under control is the fact that 49% of surveyed NAPM respondents are ordering production materials 30 days or less in advance—the lowest such reading in months.

That's not to say that there aren't a few problem areas. Chloralkalis, for example, are somewhat hard to come by. Ditto, titanium dioxide, ferrovanadium and bearings. On the other hand, steel has eased considerably. So have plastic resins and semiconductors as new capacity begins to come onstream in both sectors.

Paper and paperboard supplies should also begin to ease. So should nonferrous metals—particularly copper, aluminum, zinc and lead; this could mean some price declines from current inflated levels—particularly in the copper area.



In a nutshell, buyers are basically optimistic—expecting availability to slowly improve as the year wears on. But they're quick to add that this doesn't mean any dramatic turnaround.

One purchasing vice president sums it up: "Capacity increases are still far from overwhelming. Couple this with still-rising demand, and what we see ahead is a slow move toward better balance rather than a return to the glutted buyers' markets of a few years back."

R&D rises over 1988

Research and development outlays are heading for another good year, with totals expected to top the $129 billion mark—up some 3.4% from 1988 levels.

The new projections, supplied by the prestigious Battelle Institute, indicate that this will leave room for about a 2% real gain—since R&D inflation is put at less than 1.5%. The Columbus, Ohio-based firm adds that while this is under the average 3.6% real gain of the past decade, it should be enough to guarantee a continuing flow of product introductions and increased productivity.

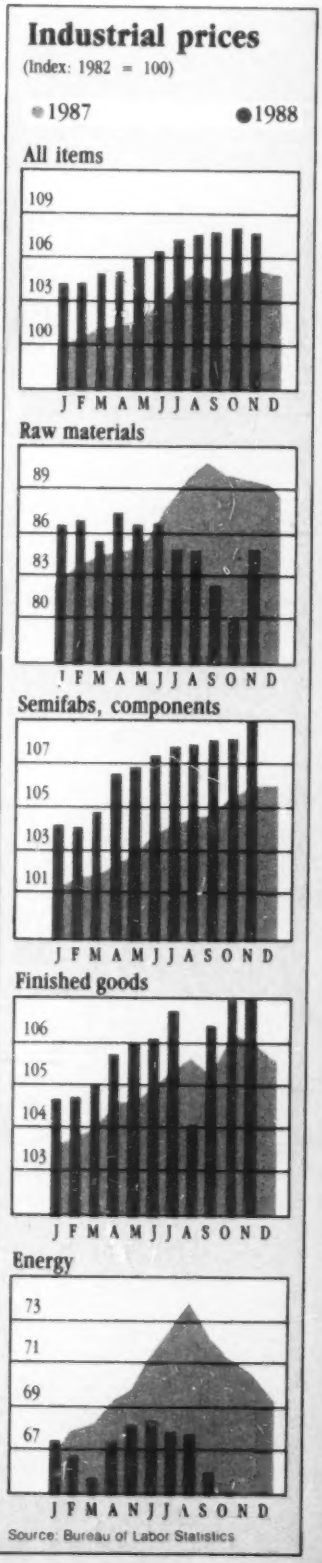
In any case, firms seem to be getting more bang for their R&D bucks—generally by shortening the time needed to develop new products. One reason: Increased use of computers, particularly the use of simulation to replace time-consuming physical experimentation.

As in the past, industry rather than government or universities will be doing most of the work (see chart alongside). But a good deal of the funds for this industrial R&D will continue to come from Uncle Sam. (About one-third of all manufacturing research will be government funded.)

If you were in the number one R&D performer (aerospace), the government support is a lot larger than that. Battelle sees 82% of the $19.2 billion likely to be spent here in 1989 coming from Washington.

Other big 1989 spenders:

- Electrical machinery



and communications: Second only to aerospace as far as R&D is concerned, some $18.5 billion will be spent of which 42.8% will be government funded.

- Chemicals: At $11.5 billion total, with only 3.3% government funded.
- Non-electrical machinery: $12.1 billion, 13.8% of which will come from Uncle Sam.
- Automotive and other transportation: $11.4 billion—17.4% to be government funded.

The study also has further comments on all this government support. The small boost in defense spending will emphasize major weapon systems such as SDI and advanced aircraft. Energy funds, meantime, will continue to decline for both supply enhancement and conservation. On the other hand, look for more money for advanced materials and the superconducting supercollider.

This month's breakdown

Index: 1982 = 100

	Latest level (Dec)	% change from: Month ago	Year ago
Bearings	120.3	−0.4	11.0
Bolts, nuts, etc.	108.1	0.1	3.5
Chemicals, inorganic	104.6	0.6	8.8
Chemicals, organic	116.8	1.7	18.9
Concrete products	110.5	0.4	1.0
Corrugated cartons	112.0	0.4	6.2
Cutting tools, small	108.5	0.3	2.0
Electric lamps (bulbs)	122.5	0.3	0.9
Electronic components	118.8	0.4	2.7
Fans and blowers	115.8	0.5	4.1
Foundry and forge products	111.4	0.1	4.1
Fuel oil (residual)	39.8	9.0	−19.6
Furniture, commercial	126.4	0.4	5.3
Gasoline	55.5	−5.5	−3.3
Glass, flat	110.9	0.2	1.5
Glass containers	112.3	0.4	−0.2
Gypsum products	114.0	−1.0	−6.2
Hand tools	123.6	1.1	4.5
Hand tools, power driven	113.7	0.5	3.8
Industrial furnaces	121.9	−0.1	5.5
Integrating and measuring instruments	115.7	0.5	1.0
Internal combustion engines	112.5	0.2	2.6
Lubricating oil	106.6	0.1	7.9
Lumber millwork	123.1	0.2	3.0
Material handling equipment	109.1	0.0	3.4
Metal containers	109.9	−1.2	1.8
Metal mill shapes (nonferrous)	140.6	1.3	19.0
Metal tanks	107.4	0.5	9.3
Motors and generators	124.9	0.7	6.2
Motor trucks	129.8	−0.2	6.0
Office and store equipment	108.7	0.6	2.5
Paperboard	136.5	0.0	10.9
Paper boxes and shipping containers	126.9	0.5	6.6
Paper office supplies	118.8	0.4	8.6
Paint	114.6	0.2	5.3
Plastic resins	140.0	−0.2	18.9
Precision measuring tools	121.8	−0.2	4.4
Pumps and compressors	111.4	0.2	5.0
Refractories	115.4	0.2	3.1
Rubber belts and belting	107.9	−0.1	5.0
Scales and balances	106.7	0.0	2.4
Steel products	112.7	−0.4	6.4
Switchgear	114.7	0.4	4.1
Textiles, synthetic fibers	99.7	0.2	6.5
Textiles, gray fabrics	114.8	0.4	3.3
Tires and tubes	95.5	0.5	4.1
Transformers and power regulators	111.2	1.6	3.1
Welding equipment	119.0	0.8	6.3
Wire and cable	148.8	4.9	18.7

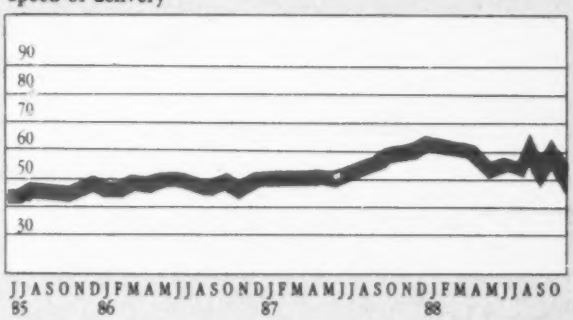
NAPM procurement trends

(seasonally adjusted diffusion indexes)

An index where 50 is defined as the neutral level, to the extent a reading is above 50, it represents an expansionary tendency. More particularly, rising inventory prices, and new orders are seen as positive signs of economic growth. A trend toward slower deliveries is similarly interpreted.

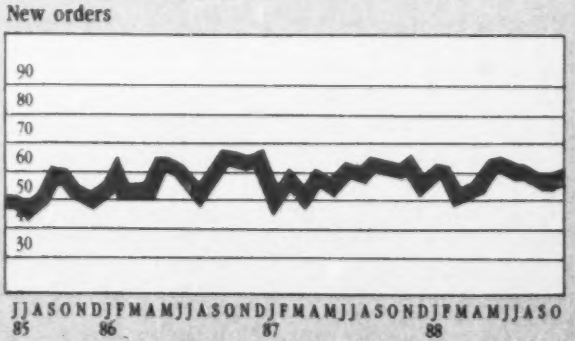
Inventories

Speed of delivery



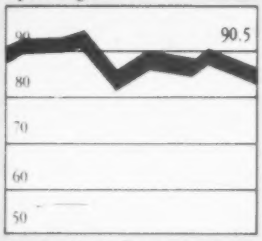
Prices

New orders

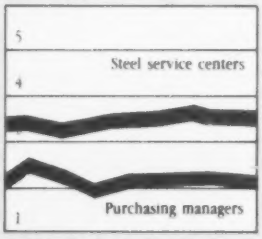


Steel

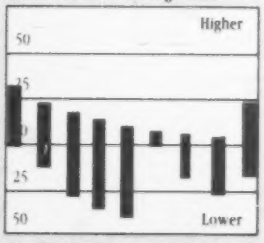
Operating rates



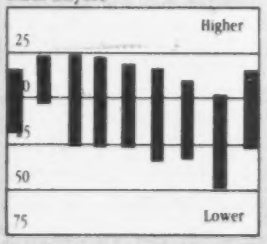
Inventories
(Months supply on hand)



Demand
(Percent of respondents)
Service centers incoming orders



Steel buyers



Source: Steel Service Center Institute, NAPM Steel Buyers Committee

Steel slowdown? Not so

Earlier fears of a steel demand slowdown may gave been exaggerated. At least that's the message to be gleaned from new distributor and buyer surveys.

The latest Steel Service Center Institute (SSCI) report shows 24% of the respondents expecting a pick-up in incoming orders over the next three months—significantly more than the 18% who still expect some erosion.

What makes this finding so encouraging is that it is a direct reversal of just one month earlier. At that time there were 36% who were anticipating near-term cutbacks in their business, far more than the 10% who were looking for gains at that time.

Results of the NAPM steel buyer survey also point to a demand turnaround—though the findings here aren't quite as dramatic as noted for service centers. Thus while the gap between those anticipating falls and those anticipating gains has narrowed (from 26 percentage points to only 13), declines still predominate.

Talks with both groups suggest the new optimism is based on a somewhat more rosy general economic outlook. Most business analysts now put first half 1989 GNP growth at a 3.5% annual rate—about one percentage point above earlier estimates.

This, in turn, is translating into an improved steel demand projection. One mill now estimates consumption over the first half at around 51 million tons—almost two million more than the figures reported over the last six months of 1988.

SSCI president Andrew G. Sharkey observes that even in the auto industry any easiness will be masked by a large increase in transplant production. He also sees an increase in process-related capital spending. On the other hand, steel demand from the construction and appliance industries is expected to be rather weak.

Sharkey also sees a continuing downtrend in steel inventories. Indeed, service center reductions already seem to be well under way, with SSCI member holdings led by a fall-off in carbon flat-rolled products—dropping for three consecutive months now.

Judging from survey responses, this trend will continue. Some 58% of those queried, for example, still feel stocks are too high—dwarfing the minuscule 5% who feel some inventory increases might be in order.

The distributor survey also lends credence to forecasts calling for a moderation in the steel price uptrend. When asked what their replacement costs would be six months from now, 65% said they would essentially be unchanged—the largest such figure in almost two years. And of the remaining 35%, 11% felt that tags could actually edge a bit lower.

Relatively stable prices, however, are not expected to set off any new wave of import competition. Sign of the times here: Less than one out of five service centers says foreign material is currently lower than domestic—and even then the advantage is put in the relatively low 6-10% range.

Steel buyers on the whole tend to agree with this foreign price assessment. Only 22% say overseas mills are currently offering prices under domestic levels. And, as in the case of distributors, they all dub the price break as "slight." These same steel buyers, responding to another question, continue to confirm reports that supplies have been easing. Only 39% of those queried, for example, report one or more problems—a marked change from last spring when 90% of the buyers were having difficulty in getting all the steel they needed when they needed it.

Import prices
(compared to domestic)

Steel buyers

ABOVE 60%
SAME 18%
SLIGHTLY BELOW 22%
SUBSTANTIALLY BELOW 0%

Service centers (carbon)
ABOVE 2%
SAME 80%
5-10% BELOW 18%
10-20% BELOW 0%
OVER 20% BELOW 0%

Import bargains scarcer, but still coming

While a softer dollar may have made overseas bargains a bit harder to find, imports are still coming in at a good clip. More important, they're likely to continue doing so over the new year.

So say the majority of purchasing managers responding to a new *PurchasingWorld* magazine nationwide survey. As one buyer put it "Imports have become part of our integrated supply line. And while totals won't be going up as they did a few years back, our 1989 incoming shipments should equal or even top last year's levels."

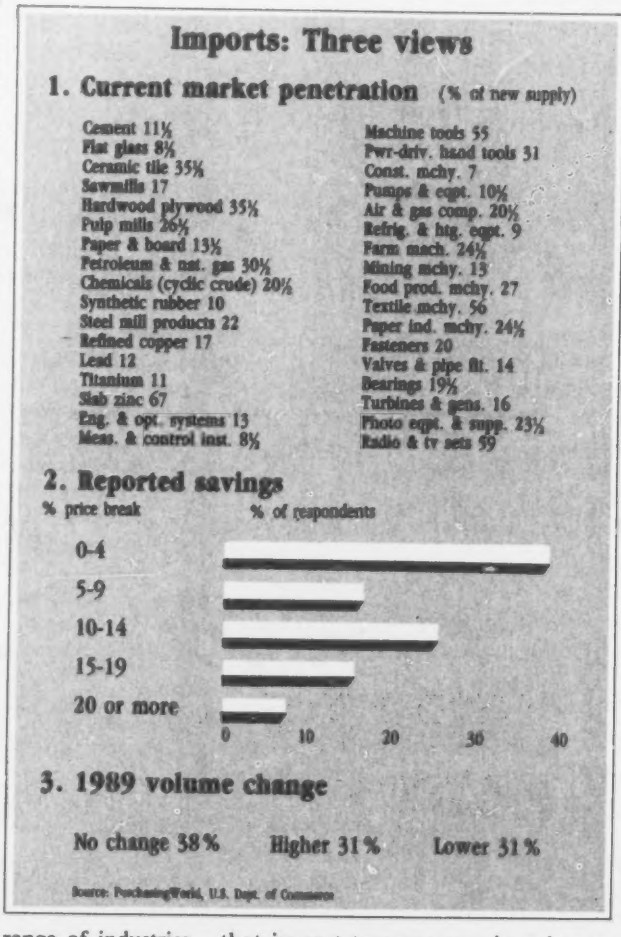
This import buoyancy in the face of the recent foreign price runup is confirmed by official government figures. The value of foreign-made goods in the year recently ended topped the $450 billion mark—actually 6% ahead of 1987 levels.

And it's not all due to one or two categories. As shown in the chart alongside, a wide range of industries now reports that 10% or more of their markets go to imports.

Not is that likely to change. For one, a leveling off in import price increases—now that the dollar seems to be stabilizing—should help sustain the current high incoming shipment levels.

Backing this up, the majority of survey respondents say they do not plan on any import retrenchment this year. There are a few who do contemplate some decline. But these are being offset by a similar percentage who feel they may actually boost their imports this year.

Most would agree that imports are not quite the bargains they once were. Survey respondents indicate that import tags are running about 6% ahead of a year ago—considerably more than the comparable increase in domestic tags.



Other key price findings of the just-completed *PW* study:

• **Price advantage:** Nearly two thirds of those questioned report that the domestic/overseas price gap has narrowed. About 45% now note price breaks of 10% or more—considerably fewer than a year ago when 55% of the respondents were experiencing savings of this magnitude.

• **Projected price changes:** While most raw materials—including metals, plastics, chemicals and paper—are expected to hold steady or rise only slightly, and more highly fabricated products should experience considerable advances. Bearings, for example, are mentioned by several PMs as a likely candidate for some big boosts.

• **Price guarantees:** Most buyers say they manage to get some price protection. Just over half report that they are able to lock in quotes for three months or longer—with a few managing freezes up to a year.

One surprising finding: Except for textiles and electronic components, not many are shifting to sources where the dollar has held up relatively well. Reason: Many are fearful such a switch could mean some deterioration in quality or service—and they're not willing to gamble when it comes to these critical issues.

Taking off on quality, PMs add that foreign products are now sometimes better than those offered by domestic vendors—and this is why they continue to lean toward imports.

But there are still other factors cited for going the import route. These include 1) multiple sourcing to guarantee an uninterrupted supply or bargaining leverage, 2) the technological leadership afforded by some foreign firms, 3) lack of availability from domestic sources and 4) company policy (including countertrade requirements).

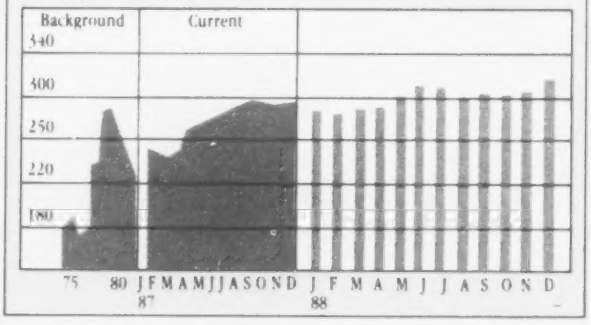
Last, there's the aggressive marketing of overseas sellers. As one buyer observes, "It's taken a long time for these people to get their foot in the lucrative U.S. market, and they're not about to give it up without a fight."

PW

Raw material price barometer

(Index 1967 = 100)

Last month 316.6
Month before 309.7
Year ago 293.1



Latest spot market prices

	Latest price	Previous month	Year ago
FERROUS METALS			
Pig iron, basic, valley, gross ton	213.00	213.00	213.00
Pig iron, Bessemer, Pitts., gross ton	213.00	213.00	213.00
Steel, billets, Pitts., net ton	367.00	367.00	367.00
Steel, structural shapes, Pitts., cwt	23.90	23.90	23.90
Steel, structural shapes, Chi., cwt	23.90	23.90	23.90
Steel, structural shapes, Los Angeles, cwt	23.90	23.90	23.90
Steel, bars, dlvd. Phila., cwt., merchant quality	16.50	16.50	16.50
Steel, bars, Pitts., cwt.	16.50	16.50	16.50
Steel, bars, C.R., Pitts., cwt.	19.45	19.45	19.45
Steel, plates, Pitts., cwt.	23.25	23.25	19.75
Steel, plates, H.R., Pitts., cwt.	23.25	23.25	19.75
Steel, sheets, C.R., Detroit, cwt.	28.15	28.15	28.15
Steel, strip, C.R., Chi., cwt.	36.18	36.18	36.18
Steel, basic wire, Pitts., cwt	23.65	23.65	23.65
NONFERROUS METALS			
Aluminum, ingot, lb. (market place)	1.130	1.075	.890
Antimony, N.Y., dealer, lb.	0.98	0.95	1.12
Beryllium-copper, cost ingot, lb.	5.90	5.90	5.90
Brass, red, 85%, [sheet], lb.	2.13	2.18	2.04
Brass, yellow, [sheet], lb	2.09	2.14	1.99
Cadmium, N.Y., dealer, lb.	8.45	7.40	3.00
Copper, electrolytic, wire bars, refd., lb.	1.50	1.55	1.40
Copper sheet, over 24 in., lb.	2.22	2.27	2.13
Lead, common, N.Y., lb.	.40	.40	.38
Magnesium, pig ingot, [99.8%], lb.	1.63	1.63	1.53
Mercury, 20 fl. lots, N.Y., fl.	280.00	275.00	345.00
Molybdenum, oxide, dealer, lb	3.46	3.41	3.03
Nickel, cathode, dealer, lb.	8.40	6.30	3.80
Platinum, dealer, oz.	520.00	593.00	500.00
Silver, N.Y., oz.	5.97	6.18	6.81
Tin, N.Y., dealer, lb.	3.44	3.42	3.20
Zinc, Prime West, East St. Louis, lb.	.80	.75	.45
Zinc, die casting alloy, No. 3, lb.	.865	.835	.505
PAPER			
Uncoated book #3 offset, ton	965.00	965.00	890.00
Watermarked bond, ton	1080.00	1080.00	985.00
Gummed sealing tape, carton	18.36	17.93	17.07
Grocery sacks, ton	460.00	460.00	435.00
Solid bleached paperboard, ton	730.00	730.00	650.00
Kraft linerboard, 42 lb., unbleached, ton	410.00	410.00	380.00
TEXTILES			
Burlap, 10 oz., 40", N.Y., yd.	.280	.280	.274
Cotton drill, 1.85, 59", 68x49, N.Y., yd.	1.18	1.18	1.24
Cotton middling, 1", N.Y., lb.	.537	.515	.600
Printcloth, 48", 80x80, N.Y., spot, yd.	.500	.500	.535
Army duck, 37", 13 oz., yd.	1.50	1.50	1.51
Blended printcloth, 64", 78x54, yd.	.70	.70	.80
20s combed yarns	1.80	1.80	2.00
Wool 64s, Staple, lb.	4.50	4.50	3.00
CHEMICALS			
Acrylonitrile, tanks, lb.	.360	.360	.395
Ammonia, anhydrous, tankcars, Gulf Coast, ton	125.00	91.00	75.00
Benzene, petroleum, tanks, Houston, gal.	1.85	1.80	.85
Caustic soda, 76% solid, drums, carlots, cwt.	28.00	28.00	26.00
Cresylic acid [over 25%], tanks, lb	.55	.55	.55
Formaldehyde, USP, 37%, [12% to 15% meth.], tanks, lb.	.106	.106	.106
Glycerine, synthetic, tanks, lb.	.76	.76	.28
Methanol, syn., tanks, 4,000 gals., f.o.b. Gulf Coast plants	.60	.60	.44
Naphthalene, crude, tanks, lb.	.16	.16	.22
Phthalic anhydride, tanks, lb.	.41	.35	.32
Polyethylene resin, low density liner film grade (market place), lb.	.515	.515	.385
Polypropylene, homopolymer grade (market price), lb.	.495	.505	.470
Polystyrene, general purpose grade (market price), lb.	.59	.59	.55
Polyvinyl chloride, pipe grade (market price), lb.	.44	.44	.38
Soda ash, 58%, light carlots, cwt.	6.15	6.15	6.15
Styrene monomer, 99.6%, tanks, lb.	.50	.47	.42
Sulfur, crude, ex-terminal, Tampa, Fla., lt.	142.00	142.00	127.50
Sulfuric acid, 66%, commercial, tanks, ton	66.86	66.86	66.86
Titanium dioxide, anatase, reg., carlots lb.	.95	.95	.80
Xylene tanks, gal.	1.40	1.30	.745
BUILDING MATERIALS			
Lumber, 2x4 fir, mbf, cl	328.39	329.06	330.25
Lumber 2x2 pine, mbf, cl	321.41	319.52	322.10
Plywood, plyform, ⅜", msf, cl	547.94	564.50	569.85
Plywood, ⅜", msf, cl	375.50	378.90	395.45
Cement, bulk, ton, tl	63.71	64.17	63.73
Sand, ton, cl	7.23	7.22	7.31
Ready-mix concrete, 3,000 psi/cu. yd., 15 cu. yd.	48.77	48.67	47.42
Crushed stone, 1½", ton, cl	6.68	6.75	8.26
Concrete blocks, sand/gravel, 8"x8"x16", per hundred	86.72	92.28	N.A.
Reinforcing bars, whse base, per cwt	20.85	20.85	20.36
Asphalt paving AC-20	105.44	108.96	139.37
Vitr. Clay Sewer Pipe, Prem Joint, 12", per ft, cl	7.26	7.26	6.99
Concrete sewer pike, 24", prem. joint, per foot, cl	17.73	17.73	N.A.
FUELS			
Crude oil (W. Tex Int Cush), bbl.	18.15	15.84	16.60
Diesel (reseller rack, Chi), gal.	.5175	.4700	N.A.
Fuel oil No. 2 (N.Y.), gal.	.5535	.4960	.5250
Fuel oil No. 2 (Gulf spot), gal.	.5300	.4575	N.A.
Fuel oil No. 6 (N.Y.) contract cargo, bbl.	20.00	18.75	N.A.
Gasoline (reg lded NY), gal.	.5225	.4975	.4500
Gasoline (reg unlded NY), gal.	.4975	.4725	.4375
Kerosene (reseller rack, Chi), gal.	.6075	.5180	N.A.
Propane (Mt. Belvieu, Tex), gal.	.2200	.2038	.2375
SCRAP MATERIALS			
Steel, No. 1, hvy., dlvd., Pitts., ton	115.00	111.00	102.00
Steel, No. 1 hvy., dlvd., Chi., ton	114.00	106.00	100.00
Copper, No. 1, East, wholesale buy, dlvd., lb.	1.10	1.23	1.13
Copper, No. 2, East, wholesale buy, dlvd., lb.	.985	.1080	.1035
Brass, red, East, wholesale buy, dlvd., lb.	1.060	1.190	1.090
Brass, yellow, East, wholesale buy, dlvd., lb.	.540	.525	.425
Alum., old sheet/cast, E., wholesale buy, dlvd., lb.	.660	.615	.550
Alum., mixed clip., E., wholesale buy, dlvd., lb.	.760	.720	.645
Zinc, old, East, wholesale buy, dlvd., lb.	.24	.24	.20
Lead, clean solids, East, wholesale buy, dlvd., lb.	.28	.27	.24
Paper, No. 1 mixed, dlr., N.Y., ton	Nom.	Nom.	Nom.
Paper, old corrug. box, dlr., Chi., ton	10.00	10.00	25.00
Paper, old corrug. box, dlr., N.Y., ton	Nom.	Nom.	10.00
Old newspapers, Chi., ton	Nom.	Nom.	N.A.
Old white ledger, Chi., ton	85.00	75.00	N.A.

[Sources: Metals Week, American Metal Market, Engineering News-Record (20-city averages), The Wall Street Journal, Journal of Commerce, Chemical Marketing Reporter.]